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JANUARY 29, 1951

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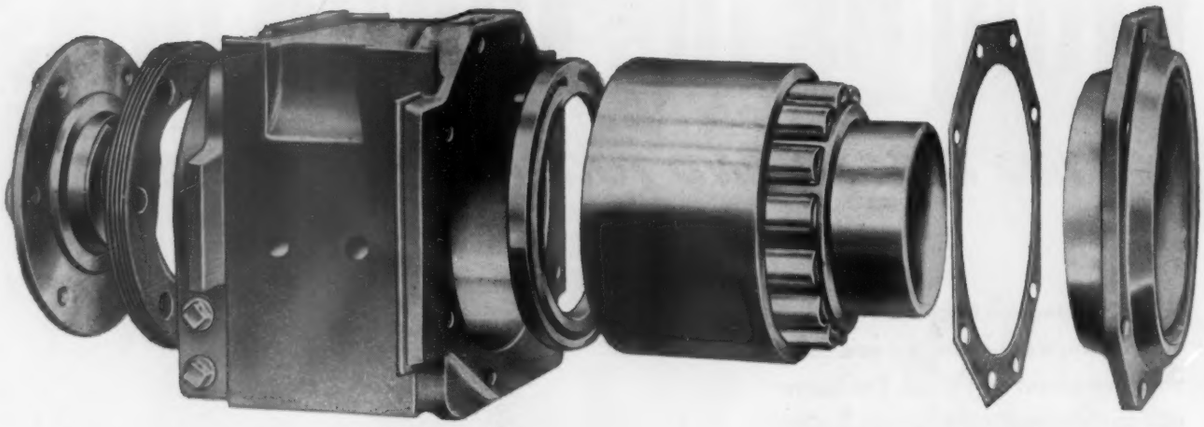
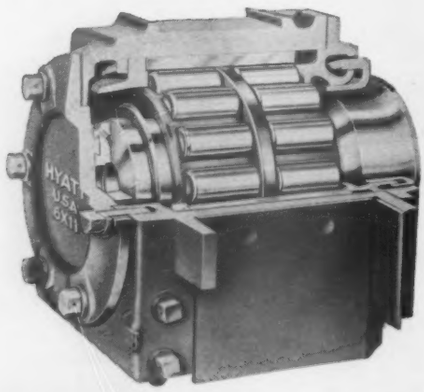
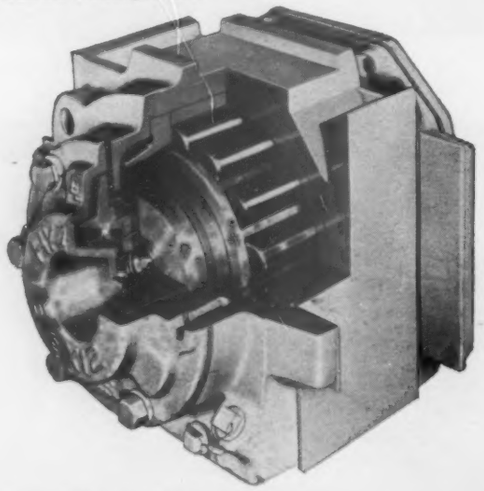
An "Inside Story"





Hyatt Roller Bearing Journal Box for Passenger Cars



Hyatt Roller Bearing Journal Box for Diesel Locomotives

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Vol. 130, No. 5 January 29, 1951

RAILWAY AGE

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IN THIS ISSUE

EDITORIAL COMMENT

GENERAL ARTICLES

DEPARTMENTS

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Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia
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Marine Engineering & Shipping Review Marine Catalog & Buyers' Directory
Books covering transportation and building

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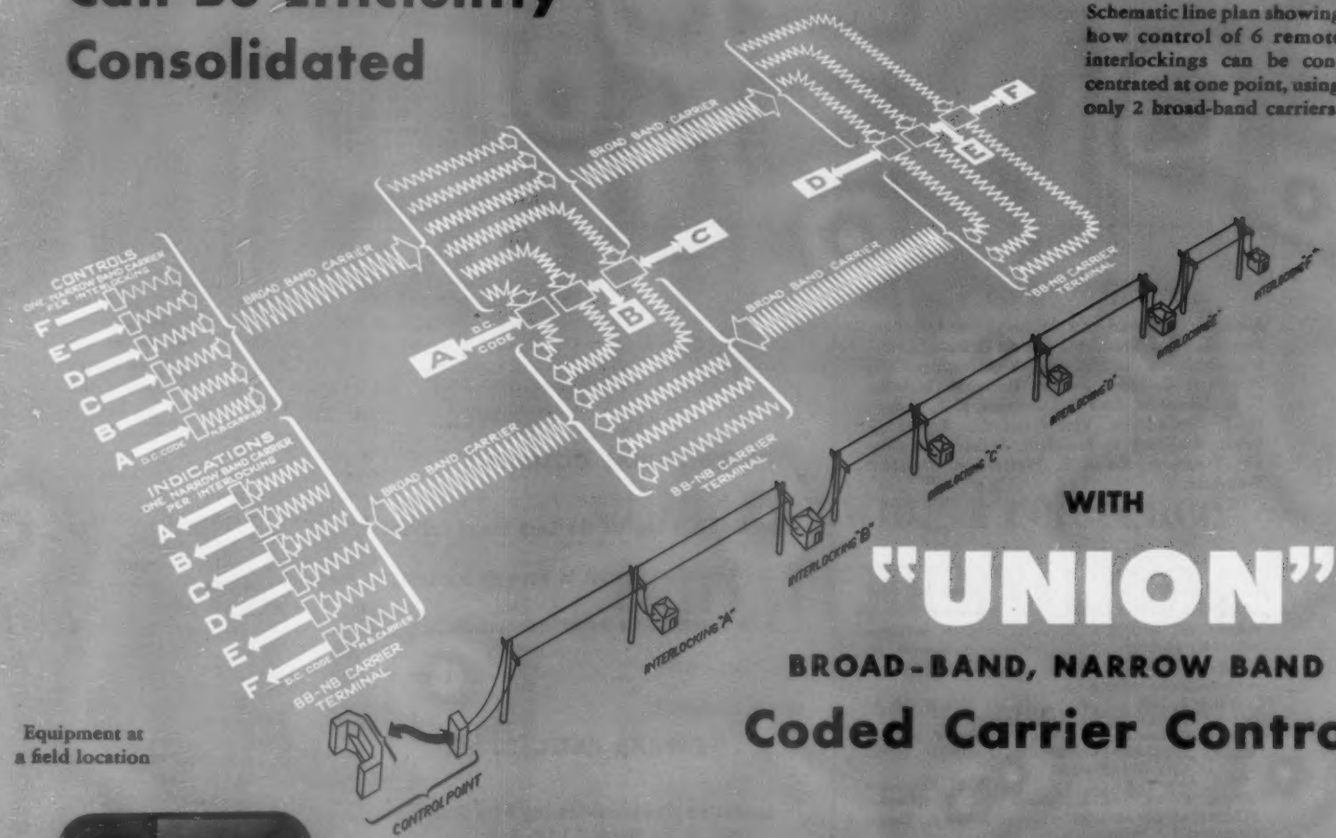
INTERLOCKINGS

Can Be Efficiently Consolidated

Schematic line plan showing how control of 6 remote interlockings can be concentrated at one point, using only 2 broad-band carriers.



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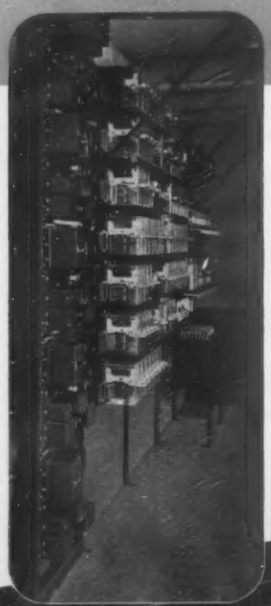
BROAD-BAND, NARROW BAND Coded Carrier Control

Equipment at a field location



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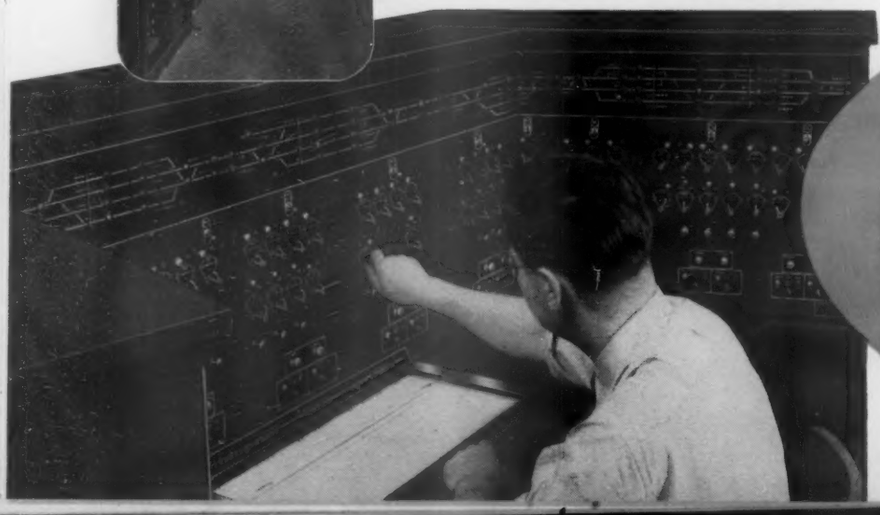
It utilizes narrow-band frequencies—modulating broad-band carriers—in such a manner that the controls and indications of an extensive series of remote interlockings can be confined to a relatively narrow range of frequencies handled by a few broad-band carriers.

Our representatives will be glad to show you how you can obtain greater efficiency and save money . . . with "Union" Broad-Band, Narrow-Band Coded Carrier Control.



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WEEK AT A GLANCE

IN THE SPOTLIGHT: New president for Central of Georgia.—December, 1950, gross 20.9 per cent above December, 1949.—C.S.D. Chairman Gass says new car installations now exceed retirements.—Joint rail-barge rates deferred again.—N.P.A. acts to assure delivery of car steel.—I.C.C. holds further hearing on reparations.—Railroads file motion for interim rate increase.—"Ops" wage case goes back to Mediation Board.—Senate, House name interstate and foreign commerce committee members.—J. R. Smith, of Southern, heads A.A.R. Communications Section.—L.&N. buys 5,950 freight cars; C.&E.I. and Buffalo Creek 1,000 each.—Erie authorizes 1,000 cars; Virginian inquires for 300.—Locomotive installations in 1950 total 2,396, highest since 1923.—U.P. to mechanize Council Bluffs mail terminal.—A.C.L. and L.&N. increase dividends; Monon pays on Class A.

OFFSETTING HIGHER COSTS: Four ways of offsetting increased cost of maintenance-of-way labor—i.e., greater mechanization, better supervision, increased life of track materials and improved track structure—were suggested in a recent address to the New England Railroad Club by L. L. Adams, assistant chief engineer of the L.&N. Mr. Adams' remarks are abstracted on pages 23-26.

THE I.C.C. REPORTS: Questions as to the "merits" of the Equitable Life Assurance Society's equipment leasing plan; seven legislative recommendations—some of which would add to its own authority; another call for greater railroad efficiency, particularly in yards and terminals; and consideration of truck traffic, railroad labor problems and competitive rate cuts highlight the annual report of the Interstate Commerce Commission, which was submitted to Congress on January 19. A four-page summary of the 129-page document begins on page 16. Pertinent to the report—much of which is undoubtedly based directly or indirectly on railroad reports to the commission—is the page 14 editorial on the railroads' own interest in accurate reporting to the I.C.C.

PASSENGER CAR UTILIZATION: A study of that subject, showing how average occupancy of such cars has declined since 1944, is a major feature of the latest "Monthly Comment" of the I.C.C.'s Bureau of Transport Economics and Statistics. Other features of this particular "Comment," which is summarized on pages 33 and 34, are articles dealing with 1950 railroad earnings, comparative trends of gross ton-miles, revenues and expenses, and proportions of traffic moving on intrastate rates.

GOVERNMENT OWNERSHIP FOR THE LONG ISLAND? Governor Dewey's special commission on the Long Island has recommended acquisition and operation of that unfortunate property by a three-man state authority—an authority which, as envisioned by the commission, would have rate-fixing powers and tax-exemption privileges to which, under our present political climate, no private management could ever aspire. The commission's report, as reviewed in the news pages, points out that its members would have preferred private ownership, but that, considering the special conditions under which the L.I. operates, continued private ownership "is simply not in the cards." The blame for that situation, our leading (page 13) editorial points out, does not rest with the distinguished citizens who have so reluctantly recommended government control, but with the politicians and the public who have created, or permitted creation of, the conditions which forced such a recommendation. Those conditions, the editorial continues, apply not to the Long Island alone, but to all railroads—they have simply hit the L.I. first and hardest. But sooner or later they will hit other roads, too—unless the fundamental underlying factors are changed. And it is up to railroad men themselves to bring about that change.

HEAVY-DUTY OIL IN DIESELS: Starting on page 28 is a survey, complete with comparative costs, of the G.M.&O.'s experience with lubrication of diesel locomotives, beginning with straight mineral oil and progressing to additive oil with crankcase fortification. The article is an abstract of a paper recently presented before an S.A.E. group by Wayne Lasky, G. M. & O. engineer of tests.

OPEN SEASON: This is the open season on annual reports. In addition to that of the I.C.C. itself (page 16), those of its Bureau of Safety and of the National Mediation Board have been released within the past few days. Both are reviewed in the News.

"I WONDER HOW WE GOT ALONG WITHOUT IT": That's what E. H. Widau, Missouri Pacific freight conductor, says of the radio train communication which his company has in service on some of its principal freight lines and which it plans to extend to other lines in 1951. Just how radio helps to keep trains rolling, safely and on time, is emphasized by specific examples cited by Mr. Widau and by other M. P. train crew members in the illustrated feature article which begins on page 20. Also described in that article are the present extent and proposed extensions of M. P. radio, and the type of equipment used.

EXECUTIVE CHANGE: As briefly reported in last week's issue, Edward A. Boshell, public utility executive, has become chairman and president of the Westinghouse Air Brake and Union Switch & Signal Companies. He succeeds A. N. Williams, who becomes vice-chairman of both organizations, while Herbert A. May becomes senior vice-president of both. The business careers of the three men are reviewed on page 27.


MORE Comfort

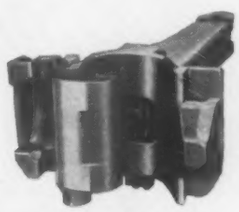
...MORE Revenue

Passengers rarely realize that the *"surface comforts"* of modern trains are possible only because of *"under-the-floor"* equipment, such as Tightlock Couplers and Rubber-Cushioned Draft Gears, that accentuate the smooth pulling power of the diesel locomotives. They only know that these trains offer the maximum of luxury and safety. So, they ride oftener and farther and thus increase passenger revenue.

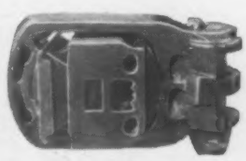
During the 83 years of National's service to the railroads, our aim has been the progressive development of such equipment. The result is that National products are always found on leading passenger trains.

High-speed diesel passenger locomotives, and heavy-duty passenger diesels enhance their smooth performance through National's Rubber-Cushioned Draft Gears.

Selection of these National products is evidence of their proved ability to provide smooth operation and maximum protection.



National A. A. R. Tightlock Coupler



National Rubber-Cushioned Draft Gear—Type M-350-A for Diesel Passenger Locomotives

National Rubber-Cushioned Draft Gear—Type M-380 for Heavy Diesel Passenger Locomotives

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In these 12 miles of pipe, rising 10 stories above the ground, water is turned into superheated steam by burning coal. The steam runs turbine-driven generators which produce electricity for home, farm and factory.

More than half of America's electricity is generated from coal. This past year more than *90 million tons* of coal went into making that electricity. That adds up to nearly one-fifth of the entire mine output of bituminous coal in 1950.

America is fortunate in having all the coal it *needs* to make all the electricity it *wants*. It is doubly fortunate in having an industry that can produce that coal in volume—efficiently and economically.

The American coal industry is made up of thousands of independent mine operators. In recent years, these progressive operators have invested hundreds of millions of dollars in new mine properties and mechanized equipment, in coal preparation plants and research—to bring all coal customers an increasingly *better* product for more *economical* utilization.

Today, no industry in America is better prepared than coal to meet the ever-increasing demands of both civilian and national defense production.

Granted a continuing supply of necessary equipment, transportation and trained man power, America's independently owned and operated coal mines will produce all the coal that's needed to continue to power the nation's progress, in peace or war.

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AN ARTIFICIAL LEG FOR THE LONG ISLAND RAILROAD

The "study board," named by New York's Governor Dewey to examine the difficulties of the Long Island Railroad, has made a preliminary report and its recommendations for socialization of the property will occasion no surprise. What is happening to this railroad is setting a pattern and a precedent for the fate which, quite likely, will overtake any other railroad which hereafter falls into similarly desperate financial straits, while rendering a service so necessary that abandonment cannot be permitted. Not only railroad managements—but also transportation men generally, the taxing authorities, and the railway labor unions—will do themselves a favor if they will observe the Long Island's course, seeking to discover what they should do to prevent a repetition of this debacle on other railroads.

There are, to be sure, special circumstances which have made profitable operation particularly hard for the Long Island, but this road's difficulties are not unique; they differ only in degree from those which chronically afflict almost the entire railroad industry. Unless these untoward influences are corrected, other railroads will in time suffer from their impact as severely as the Long Island has—and doubtless with a substantially similar result.

The significant recommendations of Governor Dewey's "study board" may be summarized as follows (the numbering being ours and not that of the board):

1. That the top management of the railroad be dismissed (Trustees Smucker and Delatour anticipated this action by resigning);

2. That the railroad be put under state ownership, to be operated "without profit" by a three-man board of the "authority" type;

3. That taxation of the road's property and securities be abolished;

4. That sums owed by the railroad to the state for unremunerative improvements (i.e., grade crossing elimination) be scaled sharply downward or eliminated entirely;

5. That the "authority" in charge of the property hereafter be permitted to fix such intrastate rates as it sees fit, without interference by the state's regulatory agencies; and

6. That employees be placed under civil service rules—the railway unions on the property to be largely removed from the protection of the Railway Labor Act.

The members of the "study board" are able and conscientious citizens. The contribution they have made to the further spread of socialism by this report of theirs does not arise from bias on their part against private operation. They simply took realistic cognizance of the forces at present working against the profitable operation of privately owned railroads in general and the Long Island in particular. Rather than take upon themselves the large-scale educational campaign which would be necessary to correct these adverse forces (a campaign which certainly was no part of their assignment from Governor Dewey), they simply turned to the expedient of socialization as the only easy "out." They are no more to blame that they have become the instruments for railroad socialization than a judge is for the criminal law which requires him to sentence human beings to death. The people who *are* responsible for the antirailroad policies which are easily avoidable only by railroad socialization are the political authorities; that is to say, the governor and his appointees—especially

the Public Service Commission—the legislature, and the electorate itself.

Recognition of the existence of strong antirailroad policies which must be corrected if the railroad is to be restored to health is implicit in the board's recommendations enumerated 3 to 6 inclusive above. In other words, the board has recognized that it is necessary to free the Long Island Railroad from property taxes, because it is suffering inordinately from competition by publicly owned transportation plant (i.e., express highways and the city-owned subway system) which is tax-free already. Moreover, the railroad must be excused from regulation by the state Public Service Commission, because experience shows that the Public Service Commission has habitually failed to authorize compensatory rates to the railroads under its jurisdiction. Finally, the railroad must be unburdened of some of the debt confronting it for unremunerative improvements; and wherever the Railway Labor Act stands in the way of prosperity for the railroad, then the Railway Labor Act will have to yield.

Socialization Not Necessary

It is not necessary to socialize a railroad to give it the relief from adverse political forces from which Governor Dewey's board proposes to emancipate the Long Island. There is, for example, no inherent reason why, under private ownership, railroad property and securities must be taxed while parallel and competing highway and transit property are exempt from such taxation. There is no inevitable reason why privately owned railroads must be assessed inordinate amounts for improvements which add nothing to earning power. There is no reason —except a political one—why railroads should be subjected to starvation levels of rates by regulatory authority. There is no inevitable necessity for keeping the railroads in an unrealistic legislative strait jacket in conducting their relations with the labor organizations. *In short, all of the adverse conditions afflicting the Long Island (and other railroads) which Governor Dewey's board proposes to eliminate for this one railroad by socializing it, could be eliminated by direct political action against these adverse forces themselves.*

If a man has an infection in his leg, the more difficult and more effective therapy is to seek out the source of infection and remove the cause. The easier and quicker "cure" is to cut off the offending member and give the patient a wooden leg in its place. One trouble about the wooden-leg treatment is that, since the source of infection is still active, the removal of one leg is not the end of the trouble. A little later on, the other leg has to come off, and then each of the other members in turn.

The expedient of amputating the Long Island's capitalistic leg and giving it a socialized wooden one would doubtless "fix up" this road for the time being—but what about the other railroads serving New York with commuter service which is just as unremunerative as that of the Long Island? Will residents of Long Island relish paying for their suburban transportation hence-forth, in part, by increased taxation on their property—from which tax increase other commuters in the New York area will be exempt? The proposal of Governor Dewey's board raises as many questions as it answers.

"Law" of Mob Behavior

To railway management in particular, the most significant aspect of the Long Island case has been the ferociously unjust treatment of the railroads' trustees. Whether the road's 1950 fatalities were the result of pure mischance or lowered employee morale, induced by corporate poverty—neither of the trustees was at fault in either case. But their complete innocence was no defense—the mob demanded scalps and, as always, the politicians obliged. A principle or "law" of mob behavior is discernible here, namely: *The management of a poverty-stricken public service corporation is vulnerable and will be crucified, without regard to justice, whenever a plausible excuse can be found.*

If anyone doubts the truth of that "law," let him note that an air line which killed nearly as many patrons in a single twelve months as the Long Island did—while, of course, moving only an infinitesimal fraction of the traffic—suffered hardly a ripple of public condemnation. But this air line was not "broke" and its standards of service had not been under relentless criticism for a decade or more. And it does not provide a necessary service, either, to the same degree that the Long Island Railroad does.

Out of regard for their own economic safety, if for no other more altruistic motive, railroad managements just must not let the temporary prosperity which military traffic has brought tempt them from their major duty to win public support for a consistent and more realistic national transportation policy. Retired New Haven Vice-President Charley Smith noted the other day how railroad men were charmed away from pursuit of this objective by the upturn of earnings during World War II. He said such satisfaction with temporary prosperity reminded him of the colored man who was asked to chop some wood for half-a-dollar, and who declined with the explanation that he already had half-a-dollar.

THE RAILROADS' INTEREST IN ACCURATE REPORTING TO THE I.C.C.

Director W. H. S. Stevens of the Interstate Commerce Commission's Bureau of Transport Economics and Statistics made an informal speech last month to the Baltimore & Ohio Accounting Association in which he outlined the errors which railroads most frequently fall into in reporting their statistics to the commission.* Most of these reports, except those covering accidents,

*Arrangements have been made so railroad officers who wish to read the complete text of Dr. Stevens' paper may obtain it by writing the editor of Railway Age.

fall in the bailiwick of the accounting department—and errors unfortunately are not too infrequent. For example, up to last December 8, Dr. Stevens' bureau had received wage reports for October from 92 Class I railroads, and it had been necessary to write to 30 of these roads requesting correction or verification. Experience indicates, Dr. Stevens went on to say, that about 90 per cent of the inquiry letters the bureau sends out regarding the wage figures result in corrections of these figures by the railroads involved.

The statistics compiled by the Interstate Commerce Commission, reflecting the performance of the railroad industry, constitute the most complete and dependable record available for any industry in the world—and the advantage of accuracy in the publication of such information is obvious. Indeed, the figures as finally published *are accurate*, as far as human frailty permits anything to approach perfection—but accuracy at the outset is preferable to accuracy attained only after questioning and correction, if for no other reason than the fact that corrections cause delays. The more promptly statistics are made available, the more useful they are.

The completeness and reliability of the railroads' statistical record should be a matter of pride—to the railroads and their accounting departments which compile them, as well as to the I.C.C. which assembles and publishes them. Nothing deflates adverse propaganda so thoroughly as respected statistics which point plainly to a contrary conclusion. Any steps which railroad accounting departments can take to impress upon their younger members the high importance of contributing all they can to maintaining—and even improving, if that be possible—the timeliness and accuracy of the I.C.C.'s railroad statistics, will be useful to the railroads as well as helpful to the I.C.C.

The demand that exists for the I.C.C.'s railroad figures, as revealed by Dr. Stevens, is most impressive—averaging 14 daily calls for information from railroad reports, excluding those on accidents. The mailing list for the "Statistics of Railways" totals 210; of the freight commodity statistics 498. Total distribution of many of the statistical reports runs as high as 800. Recipients of this information are not just companies in the transportation business either. Banks and investment houses, all the big publishers of statistical information, large industries, state regulatory bodies, numerous federal government agencies, and several labor organizations and major research services regularly make use of these data.

It goes almost without saying that the insistent claim of the railroads to a fairer competitive framework is almost wholly dependent upon the I.C.C. figures to substantiate what the railroad situation actually is. If similarly complete information—with the I.C.C. seal of dependability—were available regarding other agencies of transportation, the railroads' case for changes in basic transportation policy would doubtless be far more satisfactorily documented than it is. When an industry's well-being is as dependent as the railroads' is upon public action in accordance with quantitative facts, then the more nearly complete, authoritative and timely the facts which are made available, the better off that industry will be.

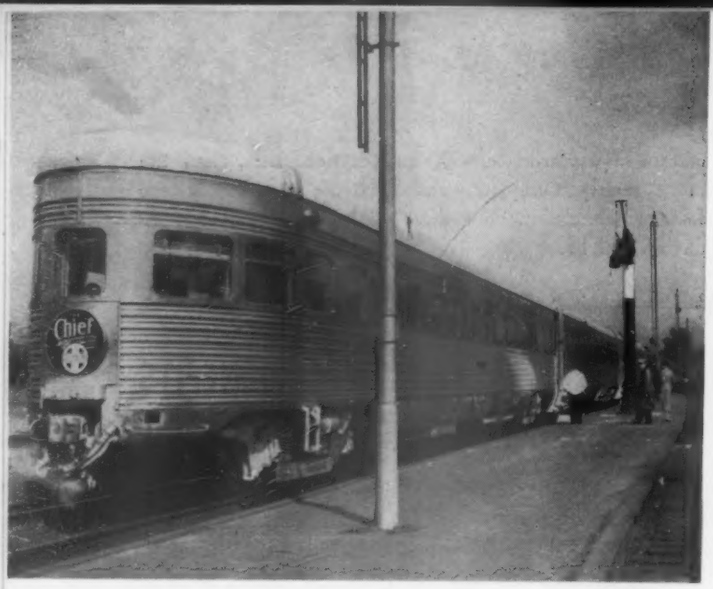
WIDE BENEFITS FROM BETTER MAINTENANCE

One of the things frequently in evidence at meetings of mechanical department men, whether formal conventions or "gab sessions," is that when the subject of maintaining virtually any type of equipment arises, as it invariably does, there is one general conclusion to which no one ever dissents. That conclusion is that a higher standard of maintenance would save money in the long run. This conviction prevails whether the men are concerned with maintaining diesel locomotives, freight cars, passenger cars, air brakes or practically anything else.

The prevalence of this opinion justifies some attention to maintenance policies on the part of top management—e.g., whether policies followed at present are truly economical. While part of the savings from improved maintenance are tangible and can be weighed against the additional cost, a substantial share of the savings are intangibles the value of which cannot be directly measured or assessed. The value of these intangibles must therefore remain largely a matter of opinion—and whose opinion is likely to be nearer the facts than that of the man most directly concerned with keeping the equipment running?

The departmental officer usually does his thinking primarily in terms of the benefit to his own particular department. When he believes that benefits to his department alone justify a higher maintenance standard, there is certainly added reason for paying attention to his ideas—because benefits to other departments then come in the form of "bonuses," and are over and above the minimum benefits necessary to justify whatever additional expense may occur.

Such bonuses are many and varied and accrue to a variety of departments other than the one concerned with the mechanical maintenance of the equipment. A well-maintained diesel locomotive is justified in the mechanical department alone by lower maintenance costs—but there are "bonuses" to other departments as well. For the operating department, a diesel locomotive in top condition with full horsepower gets its train over the road faster with less chance of breakdown. Freight cars properly maintained cause fewer train delays and less damage to lading—this in addition to the savings in the mechanical department from a program of timely and adequate maintenance. Rough handling is decreased by proper maintenance of the air-brake system. Such "bonuses" as these contribute greatly to improved performance in the operating and traffic departments—and, in the end, to better earnings for the property as a whole.



Equitable's Questions

The Equitable Life Assurance Society's plan for leasing rolling stock to the railroads presents "questions as to its merits for financing a carrier's equipment requirements" and poses "some serious accounting problems which are now under consideration," the Interstate Commerce Commission said in its sixty-fourth annual report. The report, which went to Congress on January 19, was in the usual form, being a 129-page document reviewing commission activities during the period from November 1, 1949, to October 31, 1950.

It made seven legislative recommendations, including one which would expand the commission's regulatory authority over "persons" furnishing equipment to the railroads, and another which would give the commission emergency powers over equipment rentals, thus permitting it to use the per diem rate as a device to promote efficiency in the utilization of freight cars. A third recommendation proposed that the Interstate Commerce Act's section 22 be amended to preclude the filing by the government of complaints assailing railroad rates granted to government agencies under that section.

As to the proposed amendment to section 22, the commission had previously made a like recommendation during the year under review. It urged enactment of a bill sponsored by the chairman of the Senate Committee on Interstate and Foreign Commerce—Senator Johnson, Democrat of Colorado—to stipulate that a section 22 rate "shall be conclusively presumed to be just, reasonable, and otherwise lawful, and shall not be subject to attack, or reparation . . . upon any grounds whatsoever except for actual fraud or deceit, or clerical mistake."

Some of the rates assailed in the government's pending reparation complaints were section 22 quotations accorded by the railroads during World War II. The previous Congress, in which the Johnson bill was introduced as S.4067, took no action on the measure.

Still Wants Communications Power

The report's other legislative recommendations were repeaters from previous annual reports. Most important of them from the standpoint of the railroads was a new commission call for enactment of legislation like that proposed in the so-called radio-rules bills. These would amend the Interstate Commerce Act's section 25, which now contains provisions of the so-called Signal Inspection Act, to give the commission authority over installations of radio and other train-communication systems.

On the basis of its further experience in administering section 20b (the so-called Mahaffie Act), which provides for voluntary financial reorganizations of railroads, the commission recommended that this section be amended to permit controlled or controlling stockholders of an involved railroad to vote on its revamp plan—"subject to the power of the commission to increase the prescribed percentage [75 per cent] of assets required in such cases for approval of a proposed plan." Under the present law a security is not deemed to be outstanding for the purpose of voting if the commission determines that the assent of the holder of such security is within the control of the carrier proposing the reorganization, or of any person or persons controlling the carrier.

For an explanation of this recommendation the commission called attention to comment in its previous annual report. There it said in part that the requirements of the present law "may result in the failure of meritorious plans through the refusal of a small minority of stockholders to assent, or to register any vote."

The remaining two legislative proposals were a call for the addition to the act's Part III of a new section (312a) containing provisions for revocation of water-carrier certificates or permits; and the perennial recommendation that the Standard Time Act be amended to provide for full occupancy by the federal government of the legislative field respecting the standards of time to be observed throughout the nation.

Authority Over Equipment Rentals

The proposal to give the commission emergency powers over equipment rentals was a recommendation that section 1(15) be amended to authorize the commission "thereunder" to "determine the compensation to be paid and other terms of any contract, agreement, or arrangement for the use of any locomotive, car or other vehicle not owned by the carrier using it (and whether or not owned by another carrier)." Thus the proposal would give the commission authority in times of emergency to exercise, without hearing, powers similar to those which section 1(14)(a) now provides for use in normal times "after hearing."

The recommendation served to recall that the courts set aside a 1947 commission order which undertook to prescribe an increase in the per diem rate to "promote greater efficiency in the use and increase the supply of freight cars." Generally, the court ruling was that the section 1(14)(a) powers, on which the commission had relied, were not broad enough to permit the employment of the per diem rate as an instrument of regulation to control the movement of cars. (See *Railway Age* of August 9, 1947, page 69, and November 27, 1947, page 38.)

The proposal to expand the commission's regulatory authority over persons furnishing equipment to the railroads was a recommendation that section 20(6) be amended to make it also applicable to persons who fur-

Equipment-Leasing Plan Raises "As to Its Merits," I. C. C. Says

Annual report to Congress also asserts that the arrangement poses "some serious accounting problems" — Seven legislative recommendations made

nish locomotives to carriers subject to Part I. As section 20(6) is now written, the commission has authority under it to inspect and copy accounts and other records pertaining to or relating to cars furnished by "persons." That term "would include insurance companies," the report said. In suggesting that persons furnishing locomotives be likewise covered, the report noted that locomotives are involved in some of the Equitable leasing plans.

It also said that the commission was continuing its studies of the leasing plan "with a view to making such further recommendations, if any, as our findings may warrant." Provisions of the individual leases "vary substantially," the report had said earlier in its discussion of the plan. It mentioned various roads which have entered the leasing plan, and went on to list the claimed advantages for the arrangement.

Equipment Trust vs. Leasing

The ability to obtain "much-needed" equipment without making a down payment was first on the list while "substantial savings in per diem and taxes" were mentioned also. Whether the tax saving will be realized is "questionable," the commission said. It went on to point out that the plan involved no competitive bidding in the leasing of the equipment; and that the carrier acquires no equity in the rolling stock during the first 15-year period of rental payments. Under a 15-year equipment-trust arrangement, the carrier would own the depreciated equipment, the report added.

"Our preliminary investigation," it continued, "indicates that, should the carrier exercise its option to lease the equipment for an additional period of 10 years, the cash outlay under the plan would exceed that under the usual equipment-trust agreement. The carrier would have no equity in the equipment at the end of the extended period."

Reference was next made to plans of the Pennsylvania to finance the acquisition of 5,000 freight cars and 214 diesel-electric locomotives under conditional-sales arrangements with the Metropolitan Life Insurance Company. "Here also," the report said, "the principal advantage expected is the means afforded the carrier to obtain much-needed equipment without a substantial cash payment . . . While the equipment is to be purchased at competitive bidding, the method of financing proposed would require relief from the [commission's] competitive bidding requirement in the sale of securities."

Meanwhile, the report had got under way with the commission's usual review of "transportation during the year." The 12 months under review was called a period of "unusual complexity in transportation." Its first half

was marked by a continuation of traffic declines which began in the previous year; but the Korean war then came along to produce traffic that brought on car shortages. As the commission saw it, the war also posed again the problem of inflation.

A Year of Much Transport Study

While the prospect for a "sellers' market" in transportation was expected to bring about some abatement of competitive conditions, the commission observed that there had been "no change in the basic influences at work on the transportation system." It went on to note the "unusual amount of official attention" that had been given to the "transportation problem" during the period covered by the report. Such attention included public hearings held by the Senate Interstate and Foreign Commerce Committee's subcommittee on domestic land and water transportation.

As the report put it, the carriers "took their case to Congress," raising many issues—some of concern to the commission and others "not germane to the duties Congress has placed on us." The report summarized briefly the presentations made to the Senate subcommittee; but it took "no position on the complaints made or the remedies suggested."

Turning to the matter of railroad rate increases, the commission recalled that its previous annual report had given "considerable emphasis . . . to the effects of a compounding of railroad rate increases." Measurement of the effects is "difficult," the report conceded. At the same time it cited figures indicating that 1950 increases in carloadings were less than increases in the Federal Reserve Board index of manufactures. Despite the rise in traffic which has resulted from the defense program, the "basic competitive problem which high rates present for the railroads, even though the rise in rates has been less than the rise in prices generally, remains a matter of concern to the railroads and the public," the report continued.

Truck Traffic Growing

It went on to refer to other evidence of the effect of "high" rail rates which is found in statistics on the distribution of aggregate ton-miles among the several agencies of transportation. These figures show that rail ton-miles declined 11.2 per cent from 1946 to 1949, while total ton-miles declined 0.8 per cent; and the rail share of the total fell from 68.6 to 61.4 per cent.

"A staff estimate," the report went on, "indicates that the ton-miles of Class I, II, and III motor carriers, which represented about six per cent of the ton-miles of Class I railroads in 1939 and less than four per cent in 1944, advanced to about ten per cent of rail ton-miles in 1949, with a further increase indicated as likely in the first half of 1950. The intercity freight revenues of these motor carriers are estimated as equivalent to 31 and 38 per cent of rail freight revenues in 1948 and 1949, respectively."

Reductions of "selected rail rates" were called "an indication of a need felt by the railroads for adjusting rates they consider too high for their own good." These competitive reductions "have been made possible in part by the high level of charges on other traffic," the report also asserted. It then referred to water-carrier complaints against "depressed" rail rates, and railroad protests against proposed reductions of motor and water rates. As to such controversies, the commission said that "carriers are entitled under the act to compete for traffic"; but it is "required" that competitive rates be "reasonably compensatory," that they do not result in "undue discrimination," and that they "do not lessen the carriers' ability to render adequate service."

In the same connection, the commission, the report said with citations, has "indicated that the act does not require or permit us to raise or maintain the existing level of rates on particular traffic in order to provide protection for competing forms of transportation." Meanwhile, however, it was considered "appropriate to observe" that carriers "frequently" propose rate reductions "on the basis of opinions as to what the effects on gross and net earnings will be." Where proposed reductions are certain to have adverse effects on other carriers, they should be predicated on "firmer knowledge of what they will accomplish," the commission suggested.

Rate Cuts Must Be Justified

"The burden," the report continued, "rests on the carriers to prove that rate reductions brought about by the competition of different modes of transportation will have the anticipated economic effects and that the resulting rates will be . . . consistent with the requirements of the national transportation policy . . . It appears in the light of the . . . policy and other provisions of the act that carriers should be required, in this period of basic adjustment in the rates of diverse forms of transportation, to give as adequate proof as possible of the end results of what they propose. Experience with reductions on the same or related commodities could be marshalled, in some instances at least, for this purpose. In any event, the subject is worthy of consideration and discussion."

Of "unprofitable passenger-train operations," the commission said that the resultant "heavy drain" on freight revenues "has caused us continued and increasing concern." The 1949 deficit of $649 million from passenger operations was noted, and it was pointed out that "over 60 per cent" of this loss was attributable to head-end traffic.

The competition of the private automobile and other means of travel has been met by "few railroads," and "generally only as to particular trains," the commission added. It conceded that "there is no ready answer to the problem," which calls for a "many-sided approach." The latter, it was suggested, would include further examination of what can be done in the way of abandoning unprofitable services.

As to that part of the head-end traffic represented by mail, the report called attention to the pending case wherein the railroads are seeking increased mail pay. As to the express traffic, it referred to the competition of parcel-post services. Of this situation generally, the

commission said that "competition in service or charges has risen to deprive railroad express of advantages at one time peculiar to it." Meanwhile, the Post Office Department's pending proposal to increase parcel-post rates was noted.

Calls for More Efficiency

Recalling that its two previous annual reports, and its decision in the Ex Parte 168 freight-rate case, had referred "to the great need for achieving lower costs in rail operations through greater efficiency," the commission here called again for efforts along that line. It recognized that the railroads have spent "large sums" since the war to improve their facilities; and it mentioned the "very substantial" economies which have resulted from dieselization. "It is to the credit of railroad management that these savings have been achieved, as very large financial commitments were involved," the report added.

It went on to suggest, however, that more attention might well be given to increasing the efficiency of terminal operations. The suggestion was embodied in this statement:

"While use of diesels in yard and terminal operations has been very beneficial, the greatly increased use of such power in line operation has put added emphasis on the need for improving terminal operations in the interest of securing maximum benefits from the road locomotives and in the interest of economy and improved service. The accepted indicators of operating efficiency, which continued to rise before the outbreak of hostilities in the Far East and thereafter, all relate to line service. All phases of terminal operations, including freight-house and office practices, require the fullest possible attention, though it is noted that progress continues to be reported in certain directions."

Because of the "uncertain benefits" which l.c.l. business "has been held to confer on the railroads," the commission suggested that the effect on net revenue of efforts to hold or regain such business should be "a matter of considerable interest." Meanwhile, it said that "shippers generally feel that there is still considerable room for improvement" in l.c.l. service. It also said that a proposal, "which has taken a number of forms," for the pooling of l.c.l. "has received some attention."

The report's brief discussion of railroads and the national defense referred principally to the tight car-supply situation. Later on were sections devoted to the Defense Transport Administration, which is headed by Commissioner James K. Knudson, and to the commission's work in the field of car service. As the latter section put it, "the withdrawal of cars for use by the armed forces from an already inadequate supply has made a sizable reduction in the number which would have been available to industry."

Strikes and Government Control

Meanwhile, the commission had referred to the current period of government control of the railroads, noting that it marks the sixth seizure since the beginning of World War II. The report went on to recall that each of its four immediate predecessors included a commission recommendation to the effect that these strike situations pointed up the need for "a careful new appraisal of the possibility of avoiding strikes in transportation without unduly trespassing on the rights of contending groups."

As to the tax on amounts paid to for-hire carriers for the transportation of passengers and property, the commission cited its previous annual-report discussions of the "adverse effects" on the for-hire carriers and the "discriminatory effects" on long-haul shippers. As to other taxes affecting transportation, the report noted the recent increases in income taxes and the new excess-profits tax.

The usual review of traffic and earnings of transportation agencies showed that carriers under commission jurisdiction reported, for the 12 months ended June 30, 1950, gross revenues of $13,770,966,000, of which the railroads accounted for $8,734,141,000. Revenues of private car lines and freight forwarders are not included in the total, but the report said that private car lines had revenues of $162,497,171 for the same 12 months, while the gross of the freight forwarders was $60,931,118.

Traffic figures covering all carriers were given for the calendar years 1949 and 1948, in which connection the report reproduced data previously published in the "Monthly Comment" issued by the commission's Bureau of Transport Economics and Statistics (see *Railway Age* of October 14, 1950, page 39, and November 18, 1950, page 65).

Employee and Investor "Shares"

The commission's analysis of railroad earnings revived the table (omitted last year) which considers employees and investors as jointly producing an income to be shared by them.

The figures, covering the 12 months ended June 30, 1950, showed that the railroads in that period collected gross revenues and other income totaling $8,696 million. Outlays for materials and supplies, depreciation charges, other expenses (except wages and salaries), and taxes, including payroll taxes, absorbed $3,566 million, leaving $5,130 million as the "remainder for employees and investors." Wages and salaries—the "employees' share"—took $4,149 million, leaving for investors $981 million or 19.1 per cent of the employees-and-investors total. The commission's comment on this showing pointed out that the "employees' share" would be increased if payroll taxes were included in that item instead of with other taxes.

Rate-Procedures Agreements

In its discussions of rate-procedures agreements made by carriers under the act's section 5a, which was added by the Reed-Bulwinkle Act, the commission complained that the lack of staff prevented it from keeping "properly informed in relation to the terms of the agreements and the conditions of our approval." The report also contained a couple of other complaints about the lack of what the commission considered an adequate staff.

One such complaint referred to the difficulty which the commission has in enforcing its requirements as to car-spotting services at industrial plants. There must be enforcement "if uniform practice in respect of allowances and switching services and equality of treatment for all shippers is to be observed," the report said. It added:

"It cannot be too strongly emphasized that an anomalous situation exists whereby we have ordered unlawful practices discontinued at particular plants in approximately 90 proceedings, after investigation and hearings, while other industries, in similar circumstances, continue to receive what may constitute unlawful services or rebates in the form of allowances, because of our inability to make plant inspections, necessary in connection with these proceedings."

The remainder of the report included the usual separate reviews of the year's work of the commission's various bureaus.

In the cab of the locomotives, the radio set is within easy reach of both men

1,540 Miles of Radio Train Communication On the Missouri Pacific

Projects in service and authorized include 15 steam locomotives, 122 diesel locomotive "A" units, 119 cabooses and 12 wayside stations on 1,540 miles of road — Large scale program made practicable from economic standpoint by adopting 12-volt caboose radio power plants to reduce costs

The Missouri Pacific, which has had five years of experience with train radio communication on through freight trains, is now completing an extensive project of this nature, and has authorized more for 1951. Records kept of an early installation on this railroad indicated that radio equipped trains moved over a specified 100-mile engine district on an average of 30 minutes faster than non-radio equipped trains.

The same records indicated a virtual elimination of train break-in-twos due to air being set from the rear end of freight trains because of hot boxes or other circumstances. These are the principal reasons the Missouri Pacific decided to expand its freight train radio communication system.

The overall costs for train communication were decidedly reduced, in 1950, by applying radio on the cabooses which operates on 12 volts d.c. supplied by a 12-volt, 75 amp. axle-driven charging generator system and a 12-volt, 240-a.h. storage battery. As stated by Missouri Pacific communication engineers, this reduction in the cost of power supply on each caboose to approximately $700 installed is one of several factors that made it practicable to install train radio communication extensively on this railroad.

Time Saved by Communications

In a recent conversation, V. C. Halpin, superintendent of the Central Kansas-Colorado division, said that "the radio on 53 road diesel locomotives and 60 cabooses on this division is a valuable asset in our operations." Further conversation with enginemen and conductors brought forth statements as follows:

E. H. Widau, conductor: "On a long train, radio saves time when cutting a train at crossings when the engineer can tell me he has a red block ahead. We stop; pull the pin; and radio him to pull ahead into the clear. When the head end radios it has a clear signal, the brakeman flags the crossing, and, when safe to move, I radio the engineer to make the back-up move. It's so much simpler and easier that way, I wonder how we got along without it all these years."

J. E. Cassida, fireman: "Our radio takes the guesswork out of what's going on behind the engine. No. 169 was stopped on a red block at the Paola interlocking plant and we had to cut the train to clear the crossings. On account of a curve we couldn't see the rear end, but the conductor directed the cuts by radio and also the coupling up again. We made three cuts, that had to be put together again, and it was all done without the engineer or myself ever seeing the conductor. Saved a lot of time over the old way of passing hand signals."

H. L. Bradford, conductor: "With radio there is no more tearing up a train by setting the air from the caboose; no more long walks to the head end to find out the numbers of some cars picked up at a connection on handed-up orders. Now, after the pick-up is made, the head brakeman simply radios the numbers back to

In the cabooses the radio is on the wall where it can be used by a man standing in the car or seated in the cupola

me. It saves steps, and it saves time too; sometimes as much as 40 to 50 minutes."

R. A. Shipley, conductor: "Now the conductor can notify the engineer that he may resume speed when caboose has passed a certain point, covered in slow orders. Heretofore, the engineer just had to guess at this and often held the slow speed long after the point was passed, just to be on the safe side, but with consequent unnecessary loss of time."

H. L. Brown, conductor: "Our train was passing another stopped in a siding. I was called on the radio by the conductor of the other train who told me that the lading in a car on my train had shifted dangerously. I radioed our engineer to stop at the next station, which was then close by, where we found it advisable to set out the car to be fixed. Radio avoided the possibility of a serious accident."

G. W. Lansing, conductor: "One night in the caboose I saw sparks flying about the center of the train and radioed the engineer to stop. We found a brake beam down and fixed it, and probably avoided tearing up a remote-controlled switch we'd soon have had to pass over. No doubt we prevented a serious derailment, and personal injuries, too."

A. L. Reynolds, engineer: "Radio helps clear up difficulties fast when we happen to have them. One night we have a break-in-two on a reverse curve, and after getting it fixed, coupled up again, and got under way, I figured we saved up to 40 minutes over what would have been the case before radio. Without radio, getting signals from the conductor and brakeman might have taken a half-hour."

The train radio projects completed on the Missouri Pacific in 1950 include equipment on 61 diesel locomotive "A" units and on 64 cabooses. Eight "A" units are used in through freight service on runs between Kansas City and St. Louis, 279 miles. The remaining units operate between Kansas City and Little Rock via Coffeyville, 525 miles; and Kansas City and Pueblo, 623 miles. Some of these locomotives are also in a pool with four Kansas, Oklahoma & Gulf and two Texas & Pacific locomotives, which are used jointly on through runs between Kansas City and Fort Worth. This route includes 287 miles on the Missouri Pacific between Kansas City and Okay, Okla.; 203 miles on the Kansas, Oklahoma & Gulf between Okay and Denison, Tex., and 101 miles on the Texas & Pacific between Denison and Fort Worth.

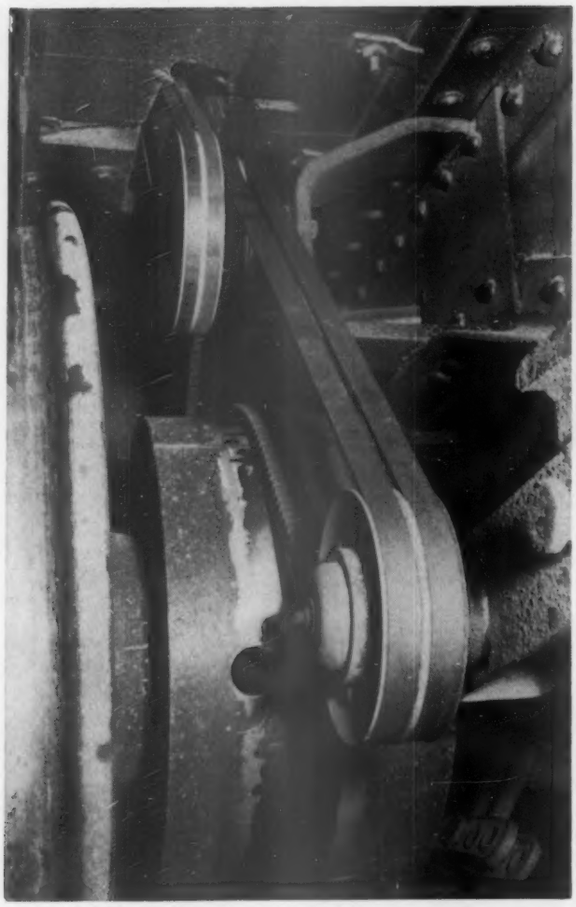
On the Missouri Pacific, one group of cabooses runs through between Kansas City and St. Louis, 279 miles; another group runs through between Kansas City and Pueblo, 623 miles; and a third group between Kansas City and Little Rock, 525 miles. The Kansas, Oklahoma & Gulf has seven radio-equipped cabooses which stay on its rails, and likewise, the Texas & Pacific has four radio-equipped cabooses for use in its territory. These radio facilities provide head-end to rear communication on practically all through freight trains on the Missouri Pacific between Kansas City and Little Rock, and Kansas City and Pueblo, as well as on the joint runs between Kansas City and Fort Worth.

Fixed Stations

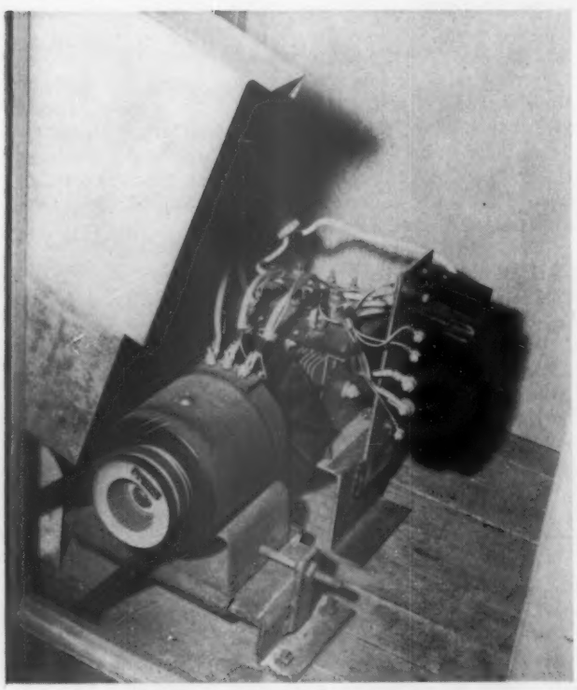
In addition to communication between the head end and rear end of trains, the Missouri Pacific has installed some wayside fixed radio stations for communication with trains. Fixed stations at freight terminals in Osawatomie, Kan., and Coffeyville, Kan., are used for conversations between the yardmasters and crews on trains, when trains are departing from or approaching these terminals. The range is 15 to 20 miles.

Also, wayside offices are located at Jefferson City, Mo., California, Tipton and Sedalia, in a section of 63 miles, which is a bad sleet storm area where the Missouri Pacific lost its pole line communications for eight days in January 1949. Also, in a storm area in Western Kansas, wayside fixed radio stations will be installed at six towns, Geneseo, Kan., Hoisington, Scott City, Leoti and Horace, and Eads, Colo. These fixed wayside stations will be primarily for communication with trains in a range of 10 to 15 miles. In case of pole line damage by sleet storms, the radio can be used for communication between fixed stations. These stations will be 24 to 55 miles apart.

The Missouri Pacific has ordered materials for radio projects to be installed in 1951, including 61 locomotives and 55 cabooses in through freight service on 213 miles between Kansas City and Omaha; 421 miles between Kansas City and Newport, Ark., via Carthage, Mo.; 253 miles between Houston, Tex., and Kingsville; and 296 miles between Houston and Fort Worth. When these 1951 projects are complete, the Missouri Pacific will



Axle pulley and belt drive through the car floor of a caboose



A 14-volt a.c. machine feeds through a rectifier to charge the 6-volt, 240-a.h. storage battery

have train radio on 15 steam locomotives, 122 "A" units of diesel locomotives, 119 cabooses and in 12 wayside fixed stations. These facilities will provide communication for practically all the scheduled through freight trains on 1,540 miles of road.

The train radio equipment installed on the Missouri Pacific in 1950 is the FMTU-80 type made by Motorola, Inc. The same type of equipment is used interchangeably in locomotives, cabooses and fixed wayside offices. At present, all road freight train radio equipment, locomotives, cabooses, and way stations operate on the Missouri Pacific's assigned end-to-end frequency of 160.41 mc. However, plans are under way to adopt a dual-frequency system to eliminate interference between mobile and way stations, which is expected to result from the increase in radio equipment to be installed in 1951 and from additional base stations to be installed later. Crystal oscillator switching will be used at base stations and on mobile units to eliminate necessity for dual equipment and its resultant increase in power plant drain.

Caboose Equipment

The radio equipment on the cabooses operates on a 12-volt d.c. power supply. This energy is supplied by two 6-volt 240-a.h. lead acid batteries, which are charged by a Leece-Neville belt-connected, axle-drive, a.c. generator, Model 5150G6 rated at 14 volts and maximum of 75 amp. output. This machine cuts in at 8 m.p.h., and above that speed it feeds through a dry-plate rectifier, Model 1004-C, and a Model 3256R6 regulator, also furnished by Leece-Neville, to charge the storage battery.

The radio receiver and transmitter filaments are connected directly across the 12-volt storage battery. Receiver plate voltage of 180 volts d.c. is supplied by a synchronous vibrator fed from the 12-volt storage battery. Transmitter plate voltage of 420 volts d.c. is supplied by a small dynamotor actuated from the 12-volt storage battery when the push-to-talk button in the handset is pressed. These dynamotors are made by the Carter Motor Company, and have a rated output of 420 volts, d.c., 0.280 amps., at 5,700 r.p.m. The discharge from the battery, when receiving, is approximately 11 amp.; and when transmitting, about 30 amp.

One of the pictures herewith shows the Dayton drive for the Leece-Neville a.c. generator. The pulley on the car axle is 19 in. in diameter and 10 in. wide. The back of the duplex "V" belt runs on this axle pulley. The face of the "V" belt runs on two idlers, one ahead and one to the rear of the axle pulley, and the "V" belt also goes up over a pulley on a fixed shaft that has a second pulley with a belt that goes up through the floor of the caboose to the pulley on the shaft of the generator. At 10 m.p.h. the generator rotates at about 680 r.p.m., and at 40 m.p.h. about 2,720 r.p.m.

On each diesel locomotive "A" unit, the radio and power supply are complete and independent, so that these "A" units can be switched around to meet requirements for road service without any changes in the radio. On each locomotive "A" unit, power is taken from the starting battery to operate a Cornell-Dubilier Model 3264 vibrator converter to furnish 115 volts a.c. A power supply, included as part of the radio equipment, converts the 117 volt a.c. to the proper transmitter and receiver plate and filament voltages.

The radio installations on the Missouri Pacific were planned and installed by railroad forces under the direction of W. Rogers, superintendent telegraph, and R. A. Hendrie, assistant superintendent telegraph, and under the direct supervision of L. E. Verbarg, telephone engineer.

Offsetting the High Cost of M/W Labor

Suggesting a four-pronged attack designed to get more output per man-hour and to reduce the number of man-hours required

By L. L. ADAMS
Assistant Chief Engineer
Louisville & Nashville

When considering the problem of how to meet the higher wages that must now be paid to maintenance-of-way labor four avenues of attack immediately come to mind, namely, mechanization, better supervision, increasing the life of materials and improving the track structure.

The manufacturers are entitled to a great deal of credit for developing new and improving old machines that enable us to do more and better work with fewer men. The transition from hand labor to mechanization has been so gradual throughout the years that it has been rather difficult to convince management to give maintenance-of-way men sufficient machines to do their work, not only as regards purchase of new equipment, but also in provision of facilities for maintaining and caring for the machines in service. The need for machines should be presented in such a way as to convince management that the expenditures requested are justified by the savings that will be effected.

Mechanization and Management

Since March 1949, and particularly since September 1949, when the 40-hr. week went into effect, there has been a great demand for increased mechanization. Before we go too far, however, we should be certain that we are getting as much as possible out of our existing equipment. We should ask ourselves a few questions, and see if we can get the answers.

1. What can be done to get more work from the equipment now in service?
2. How many man-hours does each machine save?
3. What work is now being done by hand that can be done by machines now on the market?
4. What will be the savings if such machines are put on the job?

If these questions can be answered in a logical way, I do not believe that any trouble will be encountered in securing authority from management for the facilities and work equipment that can be efficiently used, nor in getting new machines developed. It is the responsibility of top-ranking maintenance officers to sell their managements on the idea that only through their actions and decisions can the necessary setup be secured.

This article is an abstract of an address presented before a recent meeting of the New England Railroad Club at Boston, Mass.

Our immediate and important duty is to get more work from the equipment we now have. I offer seven methods of accomplishing this result, as follows:

Making Machines Work Harder

(1) Through more efficient means for scheduling the use of equipment. Work should always be planned in advance so that machines will move from one job to another without loss of time. Where railroads run north and south work can be so scheduled that certain equipment can be worked in the northern territory in the summer and transferred to the south in the winter, thereby preventing these machines sitting idle for several months out of each year because of weather conditions.

(2) More careful selection of machine operators, better training of the men selected and closer supervision of their work in the field. Most operators are only as competent as their supervision. Operating a machine and maintaining it is a technical job and the operator must be instructed by someone who knows how the machine should be operated and maintained, special stress being placed on proper lubrication. The actual work to be performed by a machine should be closely supervised by the division engineer and his staff. They must know the capabilities of each type of roadway machine and how it can be used most effectively. Each machine should be checked periodically by someone thoroughly familiar with its operation and maintenance. On our road this is done by a supervisor of work equipment and 20 maintainers with headquarters at various points over the entire road.

(3) By decreasing the amount of working time lost because of breakdowns. If operators are properly trained and supervised, breakdowns can be reduced to a minimum. A small supply of carefully selected spare parts kept with each machine often prevents days of idleness while waiting for some minor part to arrive from the storeroom. Often man-hours are lost because such small items as spark plugs are not immediately available.

(4) To the extent possible, making repairs to and servicing machines before or after working hours, especially when large mechanized gangs are involved. It is

More effective supervision is urged by Mr. Adams as a means of helping to reduce maintenance costs

A section of the test track on the L. & N. where, under the sponsorship of the Committee on Track of the American Railway Engineering Association, various tie-plate hold-down fastenings and tie pads are being observed to determine their relative ability to reduce mechanical damage to crossties

nearly always possible to stagger the working hours of repair mechanics with those of the gang, and this is good insurance. The chances of having a full complement of machines in good working order every day are more favorable if such a plan is followed.

(5) By permitting the operators to work overtime where this is advantageous. If an hour of overtime will permit getting a machine in shape for the next day's work, it is much more economical to do this than to have to make repairs to the machine the next day during working hours while a large gang is standing idle.

(6) By removing red tape as far as possible. If a carburetor can be cleaned, a magneto repaired or a broken frame welded at some local shop, it is uneconomical to let the machine stand idle while going through a lot of red tape to get approval for a requisition for taking care of these small repairs. The operator or supervisor on the ground should have the necessary authority to have such work done.

(7) Through closer cooperation with the operating department. If for any reason the local operating people will not cooperate so that the work can be handled most advantageously to the railroad, it then becomes the duty of the top officers of the maintenance-of-way department to sell the management on the savings that can be made by closer cooperation between the operating and maintenance-of-way departments. The management should make this a "must." More on-track time means more track-maintenance production per day at lower cost. This should be the concern of the top management. Cooperation between these two departments must not depend upon personalities.

I think the most valuable thing that maintenance-of-way officers can do for the railroads is to convince their managements that there has been a revolution in track-maintenance practices, and that, while this has taken 25 years to accomplish, the development nevertheless requires management's careful and immediate attention just as though it had taken place overnight.

I have touched on supervision in connection with oper-

ation of machines; however, this subject must be considered in connection with all phases of maintenance-of-way work. All jobs should be carefully planned ahead and material ordered and on the ground before the gang is moved and ready to start work. Often a large amount of time is lost while waiting the arrival of some equipment or material. The job at hand should be carefully analyzed and the proper number of men sent to the job so that it can be progressed in the most efficient and economical way. Either too few or too many men will prove uneconomical.

After a job is started the supervisor should see that the foreman has properly placed his men and each man understands his particular assignment. Where the same work is performed each day over a considerable period of time, such as rail laying, economy can be effected by assigning certain duties to each man in the gang, so that he will become familiar with his particular duties and can perform these duties better and without loss of time.

Increasing Material Life

Like the wages of labor, the cost of all items that enter into the track structure has greatly increased in recent years. By extending the life of this material it is not only possible to produce a saving in the material itself but also in the amount of labor that will be required in making replacements. For instance, there are approximately 993 million ties in track in the United States, and each year added to the average life of these ties means a large saving. Assuming the average tie life is 22 years, 45 million ties would have to be placed in track each year. If the average life were extended to 30 years, we would only have to install 33 million ties per year, and as the total cost of a crosstie in track is approximately $5 we would effect a saving of $60,000,000, as compared with the cost of ties having an average life of 22 years. If the average life of ties could be extended to 40 years, a saving of $100,000,000 per year would be realized on the same basis.

In view of developments of the past few years, I agree with Mr. Magee, research engineer of the Association of American Railroads, that there is a possibility that in the future the average life of ties will reach the 40-year mark. I am basing this prediction on the assumption that a well-seasoned and well-treated crosstie will last more than 40 years, if protected from mechanical wear. At the present time an extensive test, sponsored by the Committee on Track of the American Railway Engineering Association, is being conducted on the L. & N. with a view to reducing the mechanical wear of ties. In this test are included several varieties of tie pads and various makes of hold-down fastenings. Although this test has been in track only a little over two years, some definite results are already being indicated, and within the next few years I believe that the results obtained will be such that some definite conclusions can be reached as to reducing mechanical wear of the ties. Some of these may be at wide variance from our preconceived ideas.

The life of ties can be extended if checking and splitting can be reduced or eliminated. In recent years a new process has been developed, known as Vapor-Drying, in which the moisture is removed from newly cut ties and they are treated at the same time. It is claimed that this method will greatly reduce, if not eliminate, checking, which is widely prevalent in air-seasoned ties. On several occasions, I have had an opportunity to observe a test section of ties so treated, which was placed in track in 1943. The first time I saw this test section was in 1944 and the last time was in 1949. No change could be observed in the amount of checking of these ties during that five-year interval. Tests are also being made by coating ties in track with asphaltic oil and then covering the oil with washed limestone chips or coarse sand. There is a possibility that this treatment will also prevent checking of ties in track.

The use of heavier sections of rail, where traffic justifies their use, will reduce the amount of labor required to maintain track in good riding condition as compared with the amount that would be necessary if a lighter section were used. Where we have replaced 100-lb. rail with

A test section of Vapor-Dried crossties after six years of service. Vapor drying is discussed by Mr. Adams as a means of reducing—even eliminating—the checking of ties

132-lb. rail, we have found that the intervals between surfacings have been practically doubled. On sharp curves the 132-lb. rail will carry approximately twice the tonnage of 100-lb. rail before it has to be relaid. The cost of joint maintenance and smoothing of the track is also reduced.

Longer rail has been under consideration for a number of years, and the use of the 78-ft. length as standard should prove economical. Use of rail of this length would eliminate one-half the joints and, as possibly 75 per cent of labor used in smoothing track is expended at the joints, the saving in labor would be approximately 37½ per cent. Since rails can be satisfactorily welded into long stretches, the need for increasing the standard length of rail has been reduced. I do not think there is any doubt but what, on tangents and light curves, it is economical to install rail welded into long lengths, and that a better-riding track can thus be obtained. However, I do not believe it would be economical to weld rail on heavy curves where it would be subject to excessive flange wear.

Maintenance of Joints

It is important to give special attention to joint maintenance, from the standpoints of both economy and obtaining good-riding track. In the early thirties we started heat treating the ends of new rail about 30 days after it was laid in track and also started the practice of reforming or building up the ends of the rail already in track. We later transferred the hardening of rail ends from the field to the mill, where the work could be better controlled. At first we specified a Brinell hardness of between 340 and 375, but we found that we still had considerable batter and flowing at the rail ends. After making exhaustive tests in the field a Brinell between 375 and 444 was specified, with a preferable hardness between 400 and 420. We have had less trouble with our joints since this change was made.

In reforming and building up rail ends we attempt to work over our high-speed mains at least once every two years, working only on the joints that need repairing, leaving the other joints undisturbed. We feel that keeping the joints built up at all times results in greater economies in maintenance than if this work were not done until all of the joints needed reworking, some of which would naturally be worse than others. The cost of reworking rail ends is much less if the batter is not excessive. By good maintenance of rail ends and joints the cost of maintaining the joints is not only reduced while the rail is in high-speed main track, but better rail and joint bars are obtained, when it is necessary to relay the rail in secondary or branch lines.

We have found the use of wayside oilers for lubricating high rail on curves has proved very economical. In some instances the life of the high rail on curves has been extended to four times the life that was obtained before lubricators were installed. This in turn will reduce the amount of labor required in unloading and laying rail.

We have experienced a great deal of trouble at some locations on account of soft places in roadbed and sliding fills. To correct this condition we have stabilized a number of our fills by driving rail piling and corrected soft places in roadbed by pressure grouting. At locations where it was necessary for the section men to "pull" the track two or three times a week before the roadbed was stabilized, these spots did not require any more work after they had been grouted than the adjoining track.

Painting of both bridges and buildings is one of the larger maintenance items. In view of the high wages now in effect the best paint that can be obtained should be used. This applies especially to steel bridges and structures. Where the metal is not well protected the steel will deteriorate rapidly. If steel is permitted to go too long before painting, rust will start at the exposed points, which will necessitate the expense of cleaning the steel before the new paint can be applied.

I have been attempting to outline methods of meeting higher wages for maintenance-of-way labor, but will have to admit that we have not been entirely successful in doing this on our road. Between 1929 and 1949, the average annual wage of employees in the maintenance-of-way department increased 188.7 per cent; during the same period the payroll increased 33 per cent, although a decrease of 54 per cent was effected in the number of employees. If we had not been able to make a reduction in the number of men employed, our maintenance-of-way payroll in 1949 would have been approximately $17,000,000 in excess of what it really was.

I am satisfied that all of us have not taken full advantage of all opportunities to reduce maintenance-of-way costs in the past, but I am just as confident that new ideas will be developed in the future, and we must be alert at all times to take advantage of new machines or methods that will enable us to perform our work with the least amount of manpower.

Communication . . .

For a Wider Understanding

HAMILTON, OHIO

TO THE EDITOR:

Your editorial comment in *Railway Age* of November 18, 1950, entitled, "Closer Relations with Latin American Railroaders," I am sure will bring about a better relationship. I am reminded of a similar program developed through Rotary International. This service club meets in international convention by crafts; railway transportation, operating, car building, locomotive manufacturing, and equipment groups hold a meeting each year.

The Rotary program fosters friendship and understanding through the international association with exchange of ideas and problems discussed on an open forum basis.

I had the pleasure of serving on the international committee during 1938, 1939, 1940 and 1941 with the following, who are still active in railroad operation: J. Frank Doolan, executive vice-president of the New Haven, New Haven, Conn.; F. W. Green, president of the St. Louis Southwestern, St. Louis, Mo.; and Clark Hungerford, president of the Frisco, St. Louis, Mo. Ormie Burns, freight agent of the Canadian National at London, Ont., served as secretary, he and I being representatives of the freight station section.

I am sure there are many ideas and problems in the freight station section worthy of discussion that would be beneficial to our neighbors south of the border in the same craft. Won't you please further the freight station section purposes and platform in the next Pan American Railway Congress?

WALTER C. GARD
Past Chairman, Railway Transportation Vocational Committee, Rotary International

E. A. Boshell Heads Westinghouse Air Brake and Union Switch & Signal

A. N. Williams becomes vice-chairman; H. A. May is elected senior vice-president

Left to right — Edward A. Boshell, Herbert A. May, A. N. Williams

The election of Edward A. Boshell as chairman and president of the Westinghouse Air Brake Company and its subsidiary, the Union Switch & Signal Co., to succeed A. N. Williams, president of both companies since 1946, was reported in last week's *Railway Age*. Mr. Williams has been elected vice-chairman of the two organizations. Herbert A. May, whose election as senior vice-president also was announced, first joined Union Switch & Signal in 1936. Elected a vice-president of the parent company in 1947, he has been a director of both firms since 1945 and a member of the executive committee since 1949.

Mr. Boshell was born in Melvin, Ill. He was graduated from Culver Military Academy in 1919 and from the University of Illinois School of Commerce in 1923; he received an LL.B. from the latter institution's College of Law in 1926. In the same year he was admitted to the bar in Illinois and became associated with the law firm of Knapp & Campbell in Chicago. In 1928 he became assistant general attorney for the Consolidated Electric & Gas Co. of Chicago and New York, which position he held until 1933 when he joined the Stone & Webster Service Corp. as attorney. He became vice-president in charge of finance of Stone & Webster in 1938 and held that office until becoming associated with Standard Gas & Electric Co., New York, ten years later. He has been chairman and president of Standard Gas & Electric and the affiliated Philadelphia Company, Pittsburgh, Pa., since 1948, and will continue in a consultative and advisory capacity to the utility organization. Mr. Boshell also has been associated with the Duquesne Light Company for the past three years.

Mr. Williams, born on June 14, 1888, in Denver, Colo., entered railroad service in 1904 as a rodman on the Denver & Salt Lake, now part of the Denver & Rio Grande Western. During subsequent summers he worked with maintenance and locating parties and in the engineering department of the Denver & Rio Grande, now the D. & R.G.W. In June, 1906, he became a machinist apprentice in the D. & R.G. shops at Denver. During 1907-10 he attended college, receiving an M.E. degree from Yale University's Sheffield Scientific School in the latter year.

After graduation Mr. Williams joined the Union Pacific as a brakeman, subsequently becoming timekeeper, section foreman and extra gang foreman on the Colorado division. In May-August, 1912, he was inspector of equipment on the U.P., and, in 1912-14, trainmaster and superintendent on the Missouri, Kansas & Texas, now the Missouri-Kansas-Texas. During 1914-16 he was trainmaster on the Chicago, Rock Island & Pacific. From 1917 to 1921 he worked in Mexico and the United States as construction engineer and operating superintendent for various petroleum industries.

Mr. Williams joined the Midland Valley in 1921 as assistant general manager and became general manager the following year. In 1926 he went to the Minneapolis, St. Paul & Sault Ste. Marie as special representative, office of the president. From 1927 to April 1, 1932, he was general superintendent of the Soo at Minneapolis, Minn. On the latter date he became president and general manager of the Belt of Chicago and the Chicago & Western Indiana. On August 1, 1939, he was elected chairman of the board and executive vice-president of the Lehigh Valley, of which he became president in January, 1940.

Mr. Williams was made president of the Western Union Telegraph Company in July, 1941, and chairman on December 15, 1945. He joined Westinghouse Air Brake and Union Switch & Signal on April 1, 1946, as vice-chairman. Fifteen days later he was elected president of both companies.

"In furtherance of their construction program, the railroads and private car lines now have on order 126,000 freight cars, or enough to keep the carbuilding plants busy for about a year. Orders for thousands more must be placed by the time these cars on order are completed. I pause to make note of one significant thing. The railroads are undertaking this great building program with private capital, largely on their own. Not one cent of government money has been borrowed to 'swing this deal.' Here is private enterprise in action at its best."—*James K. Knudson, Director of Defense Transportation, before Chicago Traffic Club.*

Heavy-Duty Oil in Diesel Engines

G.M. & O. experience beginning with straight mineral oil and progressing to additive oil with crankcase fortification, complete with comparative costs

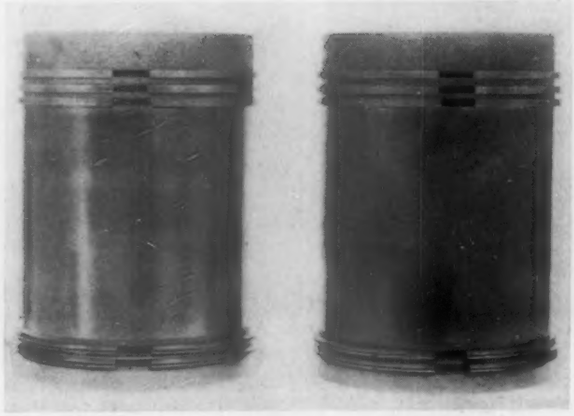


Fig. 1—Pistons from a 1,000-hp. passenger engine. The one on the left was lubricated with heavy-duty oil; the one on the right, with straight mineral oil

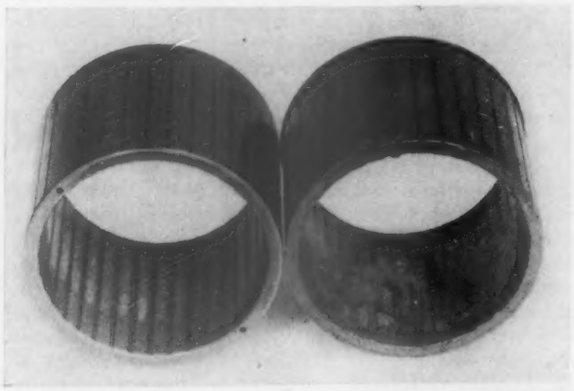


Fig. 2—The piston-pin bushing on the left was lubricated with heavy-duty oil, the one on the right with straight mineral oil. Both were in service on a 1,500-hp. freight engine

The first diesels on the G.M.&O. were placed in passenger service in 1935 using a straight mineral oil. It was necessary to renew pistons and liners every 25,000 miles and to change lubricating oil every 2,500 miles to maintain these engines in an operating condition. Laboratory analyses of periodic crankcase oil samples indicated that better oil quality would be maintained if filtering of the oil could be accomplished on the locomotive. Waste-packed filter elements were applied to these engines in an attempt to keep the lubricating oil "clean."

Filter-paper spot tests were used as a measuring stick of oil cleanliness. These are commonly referred to as "blotter spot tests" and are made by placing one drop of oil, at room temperature, on desiccator dry paper and allowing it to dry at room temperature while lying in a horizontal position.

Filtering improved oil cleanliness and thereby improved engine conditions. Piston and liner life was extended to 100,000 miles. Oil drain mileages were progressively increased from 2,500 to 100,000 miles and finally the oil was changed only at times of excessive contamination with fuel oil or water, or after a mechanical failure. Credit for a portion of the improved engine conditions should probably be given to improved injection equipment which was installed at almost the same time as the filters.

The engine parts in the hot areas were generally quite heavily lacquered and sludge deposits were rather heavy in the cooler locations of the engines. This was accepted as a normal condition and all concerned were satisfied with the improved mechanical conditions although the engines were not acceptably clean as judged by present standards.

Heavy-Duty Oil Introduced

In 1945, a number of new diesel passenger locomotives were purchased. Heavy-duty oil was placed in these passenger engines and immediately some differences were noted in the characteristics of the lubricating oil samples removed from the crankcases. The filters did not keep the oil visibly clean. Blotter spot tests, which had been used for the control of filter changes, no longer appeared to have any value since the oil did not become clean by frequent and repeated changing of the filters.

Lubricating oil changes were being made every 50,000 miles in accordance with manufacturer's warranty recommendations; however, it was noticed that the oil was maintained considerably cleaner toward the end of the oil change period than at the beginning. When these engines were out of warranty, it was decided to extend the oil mileages on one of the units. Crankcase oil conditions were closely followed. This included the determination of additive metal in the ash at periodic mileages.

Samples removed from a 1,000-hp. passenger engine periodically from the time the new oil was applied until approximately 70,000 miles of service were typical for heavy-duty oils in service in these engines. The percentage of additive metal in the oil dropped rather rapidly during the first few thousand miles of service and then remained at a uniform concentration for an indefinite period. In this instance the calcium present at the end of the test was approximately 60 per cent of the amount contained in the new oil.

This article is an abstract of a paper presented before the National Diesel Engine Meeting of the Society of Automotive Engineers by Wayne Lasky, engineer of tests of the Gulf, Mobile & Ohio.

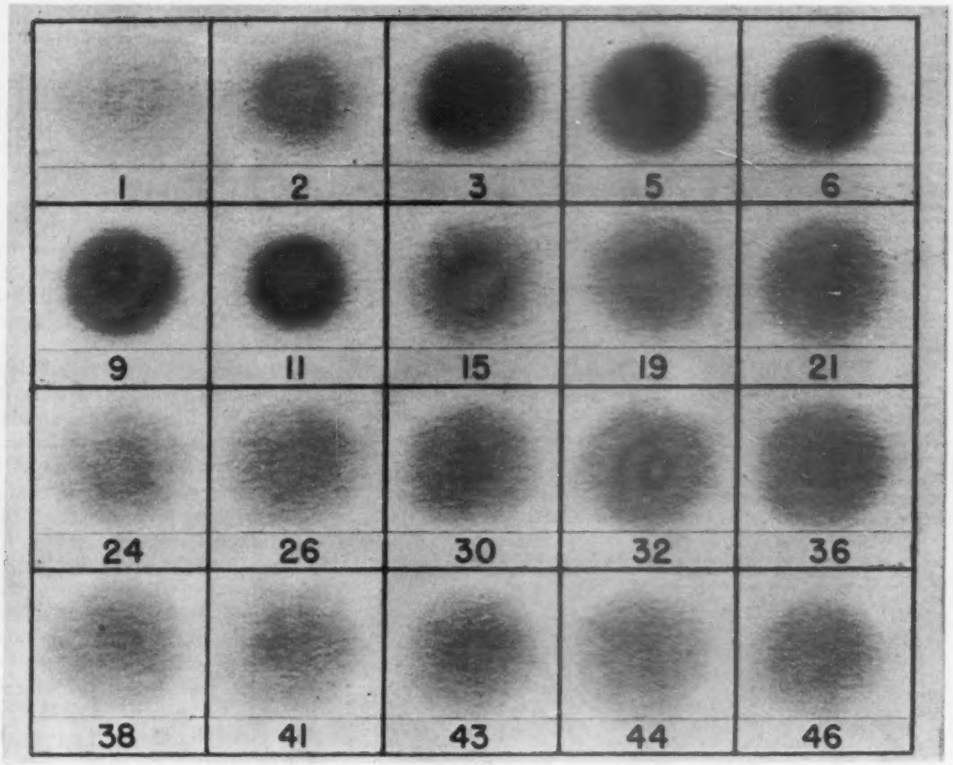


Fig. 3—Blotter spot tests, heavy-duty oil, 1,500-hp. freight engine in heavy-duty service. Oil mileage in thousands

It was generally accepted that the percentage of additive metal present in used oil samples was indicative of the original additive remaining in the oil. It appeared that the additive in the make-up oil used was sufficient to maintain the additive concentration in the crankcase at a constant value.

After 155,000 miles of service it was necessary to remove one cylinder assembly from the engine on extended oil mileage, due to a parts failure. The condition of the piston, the rings and bearings was so much better than any previously inspected that the benefits from heavy-duty type oil were clearly established. At that time it was decided to extend the oil mileage on all of these engines and to change oil in the crankcase only as required by fuel dilution, water in the oil or a parts failure. Some engines were operated 300,000 to 400,000 miles between oil changes. Extended oil mileages on these engines resulted in no particular engine difficulties. The condition of the removed parts was excellent and the engines remained reasonably clean, in fact, much cleaner than had been previously possible with straight mineral oil.

Fig. 1 represents a comparison of the conditions of two pistons, the one at the left operated on heavy-duty oil. the one on the right on straight mineral oil in comparable service. The improvement in the conditions of the pistons operating on heavy-duty type oil is comparable to the results that have been experienced during the past few years in many types of internal-combustion engines.

Results with Higher-Output Engines

Late in 1946 the railroad purchased its first freight diesel locomotives. These units, which were equipped with higher-output engines, were placed in heavy freight service. Some of these higher-output engines were identical to the passenger engines except that they had more cylinders and the horsepower output per cylinder had been increased approximately 12 per cent by the injection of more fuel per power stroke.

The oil was changed in these engines every 30,000 miles during the warranty period. A number of the engines were lubricated with straight mineral oil but it was soon found that this type oil was not satisfactory. Although the oil could be kept "clean" by periodic filter changes, the engine parts became heavily coated with lacquer and sludge. Heavy sludge deposits accumulated on the top decks and crankcases. A heavy build-up of carbon and lacquer was experienced on the valve stems, contributing to valve blow-by and stuck valves. Compression rings were found stuck and oil control rings filled. Oil grooves in the piston-pin bushings also became filled, thereby preventing adequate lubrication and causing seizure of the bushing to the rod eye or to the piston pin.

Fig. 2 shows two piston-pin bushings removed from diesel freight engines after 30,000 miles service. The one on the left was lubricated with a heavy-duty oil. The bushing on the right failed on straight mineral oil. The result of the seizure can be seen on the inner surface of the bushing.

Oil cooler passages became partially filled with sludge which resulted in higher crankcase oil temperatures. Higher oil temperatures, in turn, resulted in a more rapid rate of sludge and varnish formation. The oil became increasingly reddish-brown in color which was readily noticeable on the blotter spot tests. Frequent changing of lubricating-oil filters appeared to remove the black portion of the sludge in the oil but seemingly had little effect on the reddish-brown material.

It was suspected that in the high-output engines, the moving parts in the piston area that had to be lubricated were operating at a higher overall temperature than those

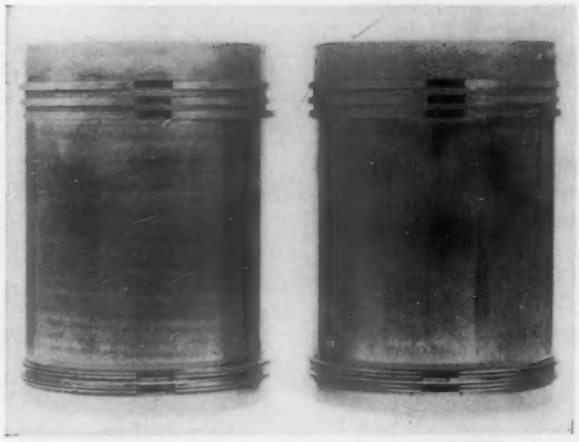


Fig. 4—Comparison of pistons where the oil was changed every 30,000 miles (right), and where crankcase fortification was employed (left). The latter is somewhat cleaner

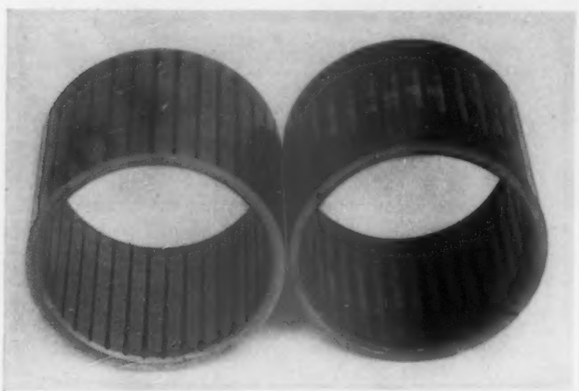


Fig. 5—Piston-pin bushings from a 1,500-hp. freight engine with heavy-duty oil and extended oil mileages. Left, with fortification; right, without fortification

in the passenger engines due to the combustion of more fuel per cylinder. This could have been one of the contributing factors of the failure of straight mineral oil to lubricate these high-output engines satisfactorily.

In a very short time, all of the diesel freight locomotives were assigned to heavy-duty oils which were being obtained from three different suppliers. Since satisfactory and economical lubrication had been experienced with these oils in passenger engines on extended oil mileages it had been planned to place these high-output freight engines on extended oil mileages after the warranty period.

However, it was soon discovered that after 30,000 to 35,000 miles the oil in the crankcase appeared to have properties similar to straight mineral oil. Continued operation of the engine without changing oil produced unsatisfactory engine conditions very similar to those experienced when using straight mineral oil. There was no noticeable difference in the results experienced with any one of these heavy-duty type oils used. It was concluded that the increased rate of oxidation and loss of dispersant properties were due to loss of additive effectiveness.

During all this work, engine conditions were correlated with laboratory oil analyses and tests, by frequent and repeated inspection of the engines and examination of the parts removed. It is possible that the rather severe loss in oxidation resistance would have been overlooked had not the engine conditions noted during the inspections so clearly indicated that something was wrong. It was possible for a trained observer accurately to estimate the mileage elapsed since an oil change by inspection, providing the engine had been cleaned at the time of the last oil change.

Oil Mileage Reduced

Due to the oil and engine conditions found, the oil in these high-output engines was changed every 30,000 miles while an attempt was being made to determine the reason for the undesirable conditions encountered with extended oil mileages. Even though analysis of the oil for additive metal indicated that a considerable portion of the additive was still present in the oil during extended oil mileages, the performance of the oil and the conditions of the engines indicated that the additive had ceased to function. It was then assumed that the additives themselves must undergo some change causing them to lose their original properties and cease functioning as antioxidants and dispersants.

Cooperative research with one oil supplier resulted in methods of correlating engine conditions with several laboratory tests of the used oil. Dark field microscope inspections were found to be reliable for determining dispersant properties of oils. The total base number (TBN-E) was found to indicate rather accurately the amount of "active" additive remaining in one heavy-duty type oil. Through constant use of blotter spot tests it was soon found that this rather simple test was quite dependable in following oxidation stability and dispersant qualities of crankcase oils. However, the interpretation of these spots is obtained by evaluating the changes noted in a series of oil samples, not from just an individual sample. Each oil has slightly different characteristics and interpretations must be varied accordingly.

Periodic Additive Addition

In June, 1948, arrangements were made to conduct a cooperative full-scale field test to determine if periodic additions of the original type additive to the oil in the crankcase would maintain satisfactory oil quality and engine conditions. Five high-output units from two builders, in good mechanical condition, operating in heavy freight service were selected.

A full charge of 200 gal. of new lubricating oil and new lubricating-oil filters were applied at the start of the test.

Filters were changed as usual every 5,000 miles on one type engine and every 6,000 miles on the other. At each filter change 15 gal. of additive concentrate were added directly to the crankcase. The additive concentrate consisted of the same base oil as used in the engine but contained five times the amount of additive contained in the new oil. By adding 15 gal. of concentrate, the same amount of additive was placed in the crankcase as was contained in 75 gal. of new oil. The tests on some of the units were interrupted on a few occasions by the need for oil changes due to excessive fuel or water in the oil.

Other tests were interrupted by oil changes made by maintenance forces not aware that the unit was on test.

However, several of the engines were operated with extended oil mileages, including one run of 136,698 miles, another of 118,474 miles and another of 117,078 miles before the oil was drained. The oil in each instance was drained because work was required on the engine or by error and not because of the oil quality. Periodic inspections of these engines during the entire test have

shown them to be satisfactorily clean. Sludge deposits and lacquer conditions have at all times been comparable to conditions existing on engines operated on heavy-duty oil with low-mileage oil changes.

Fig. 4 shows two pistons removed from high-output freight engines. The one on the left was removed from one of the units in the fortification test after 94,600 miles of continuous service without an oil change. The piston on the right was removed from an engine which had the heavy-duty oil changed every 30,000 miles. The condition of both pistons is satisfactory. However, the skirt of the piston from the test engine is somewhat cleaner, and there are less deposits in the ring grooves and on the area above the rings.

Fig. 5 is from a photograph of two piston-pin bushings removed from high-output diesel engines. The one on the left was removed from one of the engines on the fortification test after 94,600 miles of continuous service without an oil change. The bushing on the right was removed from an engine after 126,213 service miles. No additive was added to this engine during this period, but the oil had been changed once, giving oil service mileages of 64,746 and 61,467 miles. The grooves in the bushing from the test engine are clean and there is no evidence of corrosion. The other bushing shows considerable corrosion and filling of the grooves. Laboratory tests on the oil with crankcase fortification indicated that at all times the oil maintained satisfactory dispersancy.

Conclusions Drawn from the Test

Interpretation of the oil analyses and blotter spot tests shows that the quality of the oil was maintained in a satisfactory condition throughout the test. Periodic inspections of the engines and examination of the parts removed reflected the results of good lubrication.

The results of the full-scale field test indicate that:

1. The percentage of additive metal in the crankcase oil is not indicative of the original additive remaining in the oil.

2. Some reaction takes place with the additive in service which reduces its effectiveness.

3. High-output diesel freight engines in heavy freight service cannot be operated satisfactorily for extended oil mileage with some of the heavy-duty oils available today. Previous experience indicated that they could not be operated satisfactorily with the straight mineral oils offered to the G.M.&O.

4. By periodic replacement of the additive in the crankcase oil, these engines can be operated satisfactorily for extended oil mileages with some heavy-duty oils.

It is more economical, based solely on the cost of new lubricating oil, to operate high-output diesel engines for extended oil mileages with crankcase fortification than to change oil when the normal additive appears to become ineffective.

Oil Cost Data

Table 1 shows the cost of lubricating oil required for a freight engine under normal lubricating practices with oil changes every 30,000 miles as compared with the same engine on extended oil mileages with crankcase fortification. This type engine has a crankcase capacity of 200 gal. and requires approximately 12 gal. of make-up oil per 1,000 miles. Costs are calculated for one year's operation of 90,000 miles.

After complete dieselization of the railroad, it was found necessary for economical operation to reclaim the crankcase drainings. Lubrication with fortification of the crankcase, as shown in Table 1, eliminates at least two oil drains per year per engine. The oil recovered

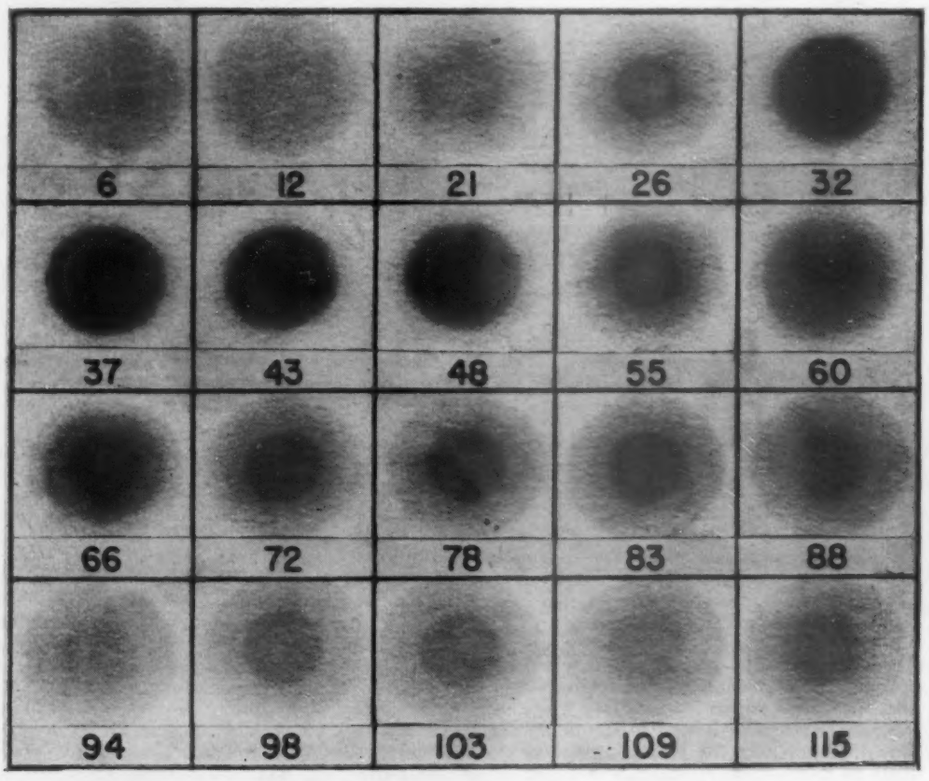


Fig. 6—Blotter spot tests of oil samples. Oil mileage in thousands

Table 1—Lubricating Oil Costs for 90,000 Miles Service on a 1,500-Hp. Freight Engine with a 200-Gallon Crankcase Capacity and 12 Gallons per 1,000 Miles Oil Consumption

	Amount (gal.)	Cost per gal.	Total cost
30,000 mile oil changes:			
3 oil changes	600	$.50	$300.00
Make-up oil	1,080	.50	540.00
Total cost			$840.00
Crankcase fortification:			
1 oil change	200	$.50	$100.00
Make-up oil	810	.50	405.00
Fortification agent	270	.65	175.50
Total cost			$680.50
Saving			$159.50
Saving, per cent			19

Table 2—Additive Added to Crankcase Oil During 90,000 Miles Service with Consumption of 12 Gallons per 1,000 Miles

	Gallons additive
Regular crankcase fortification:	
810 gal. make-up oil (3% additive)	24.3
270 gal. fortification agent (15% additive)	40.5
Total additive added	64.8
High-additive oil:	
1,080 gal. make-up oil (6% additive)	64.8

from an oil drain averages 175 gal. which indicates a reduction of 350 gal. of crankcase drainings per year per engine.

By lubricating the fleet of 50 high-output freight engines with fortification of crankcases, the G.M.&O. expects to reduce new lubricating oil costs approximately $8,000 per year and reduce the accumulation of crankcase drainings approximately 17,500 gal. per year.

The fortification method described appears to be adequate but requires the purchase of an extra petroleum product and special handling by the terminal forces. G.M.&O. officers would like to see the oil suppliers furnish an oil with additives that would remain effective for extended mileages and thus eliminate the necessity of periodic drains or fortification of the crankcase oil.

If improved additives are not available it may be possible to secure extended oil mileages by increasing the amount of the additive contained in the new oil so that the total amount of additive supplied to the crankcase over a given period would be equal to the amount of additive supplied by the fortification procedure discussed.

To illustrate, as an example one of the freight engines on test requires 12 gal. of make-up oil per 1,000 miles. The oil used contained three per cent additive by volume. Fifteen gallons of fortification agent containing 15 per cent additive were added every 5,000 miles.

Table 2 shows the total amount of additive in gallons added to the crankcase over a period of 90,000 miles by the method described, which was used during the test. It also shows the amount of additive that would be added if an oil of the same type but containing twice the amount, or six per cent additive, was used.

Inasmuch as make-up oil is usually added every 500 to 1,000 miles, the concentration of effective additive in the crankcase should remain more constant when high additive oil is used than when a large amount of additive is added at each 5,000-mile filter change.

Therefore, high-output engines in heavy freight service probably could be satisfactorily lubricated for extended mileages with the present heavy-duty oils available if the additive content of the oils were increased. It is doubtful that the advantages of higher additive oils in high-output railway diesel engines could be determined by the usual 100-hour or 500-hour laboratory engine tests. It is believed that these tests are comparable to no more than 25,000 to 30,000 miles of heavy freight service.

It is believed that the use of higher-additive oil offers sufficient promise of being able to operate with extended oil mileages to merit a full-scale field test to determine the results which could be obtained.

S.P. PRESIDENT BRIEFS ITS EMPLOYEES ON 1951

"At this time of national emergency, I call upon all Southern Pacific people to give their best efforts to our country. This is our first duty.

"It is our greatest privilege, too, in return for the blessings we enjoy—the blessings of freedom, the right of free speech, the freedom of worship as we please, the right to choose our leaders and to join with our fellow Americans in working for peace and prosperity in this country and the world.

"In striving for the protection and extension of these blessings, we American railroad people occupy a significant and basically important place. The railroads work together as an industry that underlies all other industries. We carry raw products to factories, finished products to places of assembly and of ultimate use, we carry the great bulk of products of farms, of mines and of forests. For persons, as well as things, we offer the most efficient form of mass transportation, making possible the industrial mass production that is America's might.

"Southern Pacific people made an unexcelled record in World War II. In the present emergency I am sure we shall do no less. My confidence is based on an adult lifetime of personal association with Southern Pacific men and women in all phases of our service. There are no better railroaders anywhere.

"Let us be careful, safe and alert in every action.

"Let us save materials and avert waste.

"Many oportunities are available to every employee to share in this essential and worthwhile effort. We must all bear in mind that in the overall picture individual savings will play a tremendous part in making our program successful, not only for the company, but for the nation as a whole.

"Let us cooperate with our fellow workers, and with our shippers. We have a strong and strategically located railroad plant. Let's get the most out of it.

"Let us keep our eyes and ears open, and be careful not to divulge information that would help those who might try to defeat our efforts.

"Let's be calm and resourceful in time of emergency, and considerate of our fellow workers and our customers at all times, so that we may set an outstanding example of teamwork. Let us do this, in order to save lives, in our own personal interests and in the interests of our country.

"This is our opportunity to strive for the strength and preparedness that will do most to insure peace to America and the world."—*A. T. Mercier, president of the Southern Pacific, in a statement addressed to "all Southern Pacific men and women."*

Passenger Car Utilization Analyzed by I.C.C. Bureau

"Monthly Comment" also points up other 1950 trends, in earnings, ton-miles, revenues and expenses, and proportions of traffic moving on intrastate rates

Bringing up to date its studies of railway passenger car use, the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission has released figures showing how average occupancy in passenger cars has declined since the peak war year of 1944. The bureau's presentation was included in the latest issue of its "Monthly Comment," which also contained other articles on the railroads' 1950 earnings, comparative trends of gross ton-miles, revenues and expenses, and the proportions of traffic moving at intrastate rates.

The data on the utilization of passenger cars show that the passengers per car in coaches rose from 18.1 in 1940 to the 1944 peak of 41, and then dropped off to 22.5 in the first nine months of 1950. The latter was a composite of eastern, southern and western territorial figures which were 26.3, 18.8 and 19.6, respectively.

As compared with 1944, the East's 1949 figure of 27.7 was down 31.9 per cent, while those for the South and West—19.5 and 20.5— were off 51.5 and 51.1 per cent, respectively. The bureau suggested that the higher occupancy in the East "is due, presumably, to the much heavier volume of commutation traffic in that area."

Sleeping and Parlor Cars

As to sleeping and parlor cars, the average occupancy rose from 9.1 passengers in 1940 to the 1944 peak of 20.3, and then declined to 11 in 1949. The breakdown of the latter produced eastern, southern and western figures of 10.9, 10.7 and 11.2, respectively. A comparison of these figures with the 1944 showing indicates that the East lost about 7 passengers per car, the South 11, and the West 10. The bureau called attention to the fact that a comparison of last year's first nine months with the like 1949 period shows that average occupancy (sleeping and parlor cars) in the South was up slightly in 1950—11.1 as compared with 10.9.

The average seating capacity of coaches was 72.3 in 1940 and 71.2 in 1949 and the first nine months of 1950. For sleeping and parlor cars, the figures were: 1940, 26; 1949, 25.1; first nine months of 1950, 24.8.

The average number of coaches per train was 2.33 in 1940 and 2.87 in 1949. The figures for sleeping and parlor cars were 2.05 and 2.24, respectively. Meanwhile, the average number of head-end cars per train rose from 2.44 in 1940 to 3.27 in 1949.

The bureau calculated that the per cent utilization of seating capacity in coaches was 31.6 in the first nine months of 1950, compared with 25 in 1940, 56.9 in 1944 and 33.1 in 1949. The like figures for sleeping and parlor cars were: 1950's first nine months, 44.1 per cent; 1940, 34.8 per cent; 1949, 43.8 per cent.

As noted briefly in *Railway Age* of January 22, page 35, the bureau's review of the railroads' 1950 earnings included an expression of its expectation that last year's net railway operating income of the Class I line-haul railroads "may exceed the $1,002 million reported for the year 1948." In explanation, the review pointed out that the net for 1950's first 11 months was $924.7 million; and that the carriers during that period accrued "only about $41.8 million for additional mail pay . . . out of approximately $152 million of retroactive payments . . . expected to be accrued during the year 1950 as a result of the stipulation between the carriers and the Post Office Department which was recently approved by the commission."

The bureau suggested that "no doubt" the balance of the retroactive payments would be taken into the December accounts. It noted that increased accruals for

HONORS of the Venerable Order of the Hospital of St. John of Jerusalem recently were conferred upon a former chairman and president and two present officials of the Canadian National. Left to right: William A. Armstrong, regional supervisor of first aid, Winnipeg, Man., who received the medal of Serving Brother; Robert C. Vaughan, former chairman and president, upon whom was bestowed the insignia of Knight of Grace of the Grand Priory in the British Realm of the order; and Paul E. Poitras, supervisor of first aid, Montreal, Que., who also was honored as Serving Brother

prospective wage increases were also to be expected in the December accounts; but it predicted that the net result would be a "considerably" augmented net railway operating income for the month.

Other figures in the review showed the proportions of "net income before federal income taxes" which have been absorbed by income taxes in the 1941-1950 period. The range was from 66.2 per cent in 1944 to a net income-tax credit in 1946. In the first 11 months of 1950, federal income taxes absorbed 42.9 per cent of the "net income" before such taxes.

Ton-Miles, Revenues and Expenses

The comparative trends of gross ton-miles, revenues and expenses were shown on an index-number basis with 1940 as 100. The index of gross ton-miles reached a peak of 168 in 1944, remained at "relatively high levels in the four succeeding years," and then dropped to 126 in 1949, the lowest since 1941's 120.

Meanwhile, the operating revenue and expense indices reached their peaks in 1948, when they were 225 and 242, respectively. The 1949 figures, in turn, were 200 and 223. The bureau called attention to the fact that the revenue index was "substantially higher" than that of expenses in the 1941-1944 period; but the situation was "sharply reversed" in the 1945-1949 period.

The article also included indices, for the 1940-1949 period, of revenues and expenses per million gross ton-miles, again with 1940 as 100. This revenue index increased each year from 1940 through 1949, reaching a peak of 159 in the latter year. For the first nine months of 1950, it was 160. The companion index of expenses per million gross ton-miles dropped to 99 in 1941, but thereafter increased each year to a 1949 peak of 177. For the first nine months of 1950, it was 170.

The data indicating traffic moving at intrastate rates were taken from the commission's one per cent waybill sample of carload freight terminated by Class I roads in 1949. As the bureau read the figures, they showed that the proportion of intrastate tonnage to total tonnage in 1949 was 30.8 as against 29.9 in 1947, while the intrastate revenue was 11.4 per cent of the total in 1949 and 11.7 per cent in 1947. The intrastate proportion of total ton-miles in both years was identical—8.8 per cent.

As to average revenue per ton, the 1949 figure was $1.98 for intrastate traffic and $6.90 for interstate traffic. The comparable 1947 figures were $1.68 and $5.41, respectively. The average length of haul for intrastate traffic was 96 miles in 1949 and 100 miles in 1947. For interstate traffic, it was 444 miles and 443 miles, respectively.

The bureau also made an analysis of the 1949 intraterritorial traffic to show the difference between the intrastate and interstate movements by territories. There the showing was that the intrastate proportion of 1949 intraterritorial traffic was 35.1 per cent of the tons terminated, 18.4 per cent of the revenue, and 14.9 per cent of the ton-miles.

The highest percentage of both intrastate tonnage and revenue was in Mountain-Pacific territory where 50.3 per cent of the tons and 26 per cent of the revenue developed from intrastate business. The smallest relative intrastate movement of 1949 occurred in Western Trunk Line territory—21.1 per cent of the tonnage and 14.2 per cent of the revenue.

The 1949 territorial range of average revenues per ton from intrastate traffic was from $2.38 in Southwestern territory to $1.49 in Southern territory. The bureau pointed out that the differences "correspond roughly" to differences in average lengths of haul which ranged from 81 miles in Official territory and 90 miles in Southern territory to 133 miles in Southwestern territory.

Truck Traffic

Another article in the "Comment" summarized reports of Class I intercity truckers for last year's first nine months. There the bureau noted that the motor carriers reported an increase of 23.5 per cent in tonnage as compared with the like 1949 period. That increase, the "Comment" added, "may be compared with an increase of only 4.5 per cent in the number of tons of revenue freight carried by Class I steam railways between the same periods." It was next pointed out, however, that railroad carloadings in 1950's last three months increased 28.4 per cent above those of the comparable 1949 period. This came after carloadings in last year's first nine months had been up only 2.5 per cent.

BURLINGTON'S PRESIDENT MURPHY AIRS CAR SHORTAGE PROBLEM WITH SHIPPERS

"I know that the words 'car supply' bring up a touchy subject, and I can well understand why. I don't suppose there is any group of shippers that have felt more keenly the shortage of cars than have the shippers of grain and the millers. Certainly I, for one, would not attempt to minimize your disappointment and our concern about that very difficult problem. Admittedly, there has been a shortage of freight equipment, particularly of box cars. This results from a number of conditions: The five-day week; lighter loading; the increase in movement of government freight at the height of the grain and soya bean movement; the difficulty of some lines to finance new cars and the inability of the car builders to secure car steel and parts required to build cars.

"Based upon our own experience, and I assume ours will be about the same as other lines, we have not been assured that steel will be delivered fast enough to build the freight cars presently on order in 1951.

"We had authority to build 2,750 cars on the Burlington in 1950, but we didn't start receiving new steel until the middle of the summer or late summer. Some of those cars, for lack of new steel, were carried over the new year, but so far we have not succeeded in getting the mills to accept orders we have placed. I have no doubt that the National Production Administration and those who administer it will see to it that the necessary steel is forthcoming to carry out the authorized program. So far as the Burlington is concerned, any time we can see our way clear to get steel enough to build or acquire even more box cars than we have on order, we will move up on it just as fast as the steel can be made available. There are forces enough and shop capacity enough, both in the facilities of the car builders and of the railroads that build their own cars, to build cars at whatever rate steel and wheels and other component parts are forthcoming.

"My remarks about the slow delivery of steel should not be construed as critical either of the companies that manufacture steel or of the government agencies that allocate it, but rather that you should know that it takes more than board authority to build cars."

—H. C. Murphy, president of the Chicago, Burlington & Quincy, before the Trans-Missouri-Kansas Shippers Board at St. Joseph, Mo.

GENERAL NEWS

Railroads File Motion For Interim Rate Hike

N.I.T. League opposes summary I.C.C. action on plea

The railroads on January 19 filed with the Interstate Commerce Commission their formal motion for authority to make their proposed six per cent increase in freight rates effective immediately as a measure of interim relief, pending final disposition of the petition wherein they seek the advance on a permanent basis. As reported in *Railway Age* of January 22, page 31, the railroads announced their plan to file the interim-increase motion when they filed the petition on January 16.

Responding to the petition, the commission issued a January 19 order instituting an investigation into the "reasonableness and lawfulness" of the proposed increases. It docketed the proceeding as Ex Parte No. 175 and announced that it would be assigned for hearing "as may be ordered hereafter by the commission."

On January 24, the railroads amended the petition to add a request for application of the proposed six per cent increase to charges for handling iron ore at upper Great Lakes ports on shipments forwarded therefrom by water. As filed originally, the petition proposed no increase in those charges.

The filing of the interim-increase motion brought from the National Industrial Traffic League a reply which opposed summary action, saying that no interim increase should be granted without hearing or argument. As to the merits of the proposed increase, the reply said that the League took no position at this time, because its members had not had an opportunity to consider the matter. At the same time, the League suggested that the averments of the railroads are "not self-proving."

Full Hearings Wanted

From the Department of Agriculture, the commission has received a letter urging that "no affirmative action" be taken with respect to the railroad motion; and that the matter of railroad revenue needs be determined only after "full and complete territorial hearings." The letter was signed by Charles B. Boling, who is chief of the Transportation Rates and Services Division of the department's Transportation and Warehousing Branch.

The commission is also receiving from water carriers petitions for authority to make increases in line with whatever advances may be approved for the railroads. And a similar petition has been filed on behalf of freight forwarders.

The railroad motion pointed up the showing of a verified statement filed in its support by Dr. Julius H. Parmelee, vice-president of the Association of American Railroads and director of the association's Bureau of Railway Economics. Like the petition, the motion put at $421,835,000 a year the increase in costs (including amounts involved in pending settlements of wage cases) since July, 1949, the time of the final decision in the latest general rate case—Ex Parte No. 168.

"Each week's delay in effecting rate increases to compensate for these increases in costs imposes upon the Class I petitioners a loss of over $8,100,000," the motion said. "For each month's delay the loss is over $35,150,000."

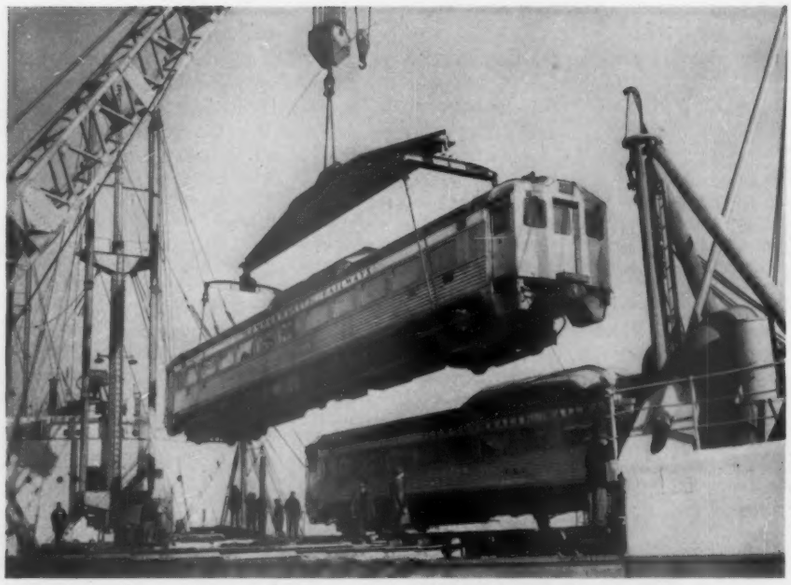
The motion went on to refer to the 1950 return of "only 3.93 per cent" on net investment, and to the prospective 1951 return of "only 3.32 per cent" on the basis of present rates. Suggesting that such a return "leaves scant leeway for the funds necessary for improvements," the motion pointed out that the annual carrying charges on the "tremendous amount" of new equipment acquired since the outbreak of the Korean war "will amount to well over $100,000,000."

Recalling that interim increases were granted in the three most recent general rate cases—Ex Parte 162, 166, and 168—the motion suggested that such procedure avoided delays that would have caused "irreparable injury" to the carriers. It was then calculated that the "irretrievable loss" would be $281,216,000 if the present motion is not granted and the commission's final decision on the petition is delayed "no longer than the shortest time" required for the final decision in any of the three earlier proceedings.

It was also the railroads' position that granting the interim increase "will not be harmful to shippers." The interest of the shippers, the motion contended, would be "amply protected" by that part of the interim-increase proposal which contemplates a railroad stipulation to the effect that claims for refunds will be honored as to any increases not finally approved by the commission.

"The ordinary practice of industrial and commercial enterprises is to make price advances simultaneously with increases in costs, if not in anticipation thereof," the motion also said. "This obviously sound and rational practice is no less sound and rational for a regulated industry, like the railroad in-

AGAIN, DENNEY TO MACFARLANE—Shortly after Robert S. Macfarlane took over the presidency of the Northern Pacific from Charles E. Denney (*Railway Age*, December 30, page 25), Mr. Macfarlane again succeeded his predecessor, this time as a colonel in the Army Transportation Corps and director of the Northwest region of U. S. railroads. Col. Macfarlane (left), shown here taking the oath of office, administered in St. Paul, Minn., by Lt. Col. A. J. Casey, now has 21 railroads of the central and northwestern states under his command. His new post stems from government seizure of the railroads last August 27 when trainmen and conductors threatened to strike



FIRST OF THE BUDD COMPANY'S RAIL DIESEL CARS to be sent abroad being loaded aboard the M.S. Belbetty at Port Richmond, Pa., on January 22, destined for the Commonwealth Railways of Australia. The entire shipment consisted of three RDC's, four standard coaches purchased from a United States railroad, and engines and other equipment of the RDC's, which had been removed for facility in shipping. It is expected the ship will arrive in Port Augusta, Australia, within 30 days. Shortly after, the cars will be placed in operation between Port Pirie on the south coast and Kalgoorlie in the west

dustry, than for industry in general. Indeed, there is greater reason for its application to railroads because the returns from their operations are so much smaller than the returns of industry in general."

Public Authority Recommended for L. I.

Commission also suggests fare increase, tax relief, new capital

A non-profit three-man Long Island Transit Authority to take over operation of the Long Island has been recommended by the Long Island Rail Road Commission in a January 20 preliminary report, which also called for a 20 per cent increase in commuter fares, elimination of future local real estate taxes, scaling down or elimination of obligations to the state, and a five-year, $67.5-million improvement program.

The special commission, consisting of Robert P. Patterson, former secretary of war, Robert Moses, New York City park commissioner and construction coordinator, and Charles C. Lockwood, a retired justice of the New York State Supreme Court, was appointed by New York Governor Thomas E. Dewey following the Thanksgiving eve accident at Kew Gardens, N. Y., in which 78 persons were killed and several hundred injured. (See *Railway Age* of December 2, 1950, page 72.) Its report was submitted to Governor Dewey.

The commission pointed out that its members "would have preferred private ownership and operation, but such a solution is simply not in the cards." In reaching that conclusion, the report reviewed at some length the "formidable" financial obstacles which private ownership would face; declared that "honest consideration of inescapable facts" demonstrates that private ownership is unattainable, and found that the road "offers little hope as a sound private investment." Their belief "that no private management would feel justified in investing the necessary funds to acquire the railroad and rehabilitate it" because "it could not look forward to the legitimate profit to which its investment would entitle it" was based largely on a 1948 report to the then parent Pennsylvania by the J. G. White Engineering Corporation.

Rejects State Ownership

The commission likewise rejected outright state ownership, management and financing as "both impractical and undesirable . . . from many viewpoints." "We do not believe," it added, "that ordinary government ownership and operation should be extended into this field."

"We have therefore," the report continued, "been forced to advocate the third alternative—the establishment of a Long Island Transit Authority." Such an authority, as envisioned by the board, would consist of three men to be appointed by the governor for six-year terms, the first appointees serving two, four and six years, respectively. The authority would be empowered to select a general manager "of recognized experience and competence"; to incur debts not exceeding $100 million; to "cooperate with other agencies . . . on all transportation and related problems . . . on Long Island," including civilian defense; and to "make recommendations . . . about the transportation facilities on Long Island."

On the other hand, the authority would not be permitted "to tax or to pledge the credit of the state or any of its municipalities." "It must," the report said, "pay its way. It has no access to the public treasury. It has inescapable obligations to its bondholders who get income tax exemption in return for a low, fixed interest rate." The reference to tax exemption was based on the commission's conclusion that "bonds issued by the authority, a state agency, would be, in our opinion, exempt from federal and state income taxes and would carry low interest rates."

Would Fix Own Fares

In addition, the commission suggested that "the authority itself could establish intrastate passenger fares on a reasonable, self-sustaining basis without the approval of either the Public Service Commission or the Interstate Commerce Commission." Interstate rates, the report added, would have to continue to be regulated by the I.C.C.

Such an authority, the special commission believes, with "advantages of both private and public managements," would be able to "acquire the railroad at a fair price, pay inescapable past obligations, and make necessary improvements over a five-year period," financing them "in such manner as it deemed best." A considerable part of the report was devoted to detailed consideration of possible methods of acquisition of the railroad by such an authority; and to the eventual "possibility" of combining "public ownership with private management," and, "ultimately," of achieving private ownership.

Pointing out that Long Island commutation fares are now "about the same" as those of other railroads handling commuter traffic in the New York area, the commission said "it appears that an increase of 20 per cent in commuter rates may be necessary to carry out the authority program which we advocate. . . . We are well aware of the hardships which will be caused by any rise in commuter rates, but we know of no way to escape it consistent with safety, service, and prompt and effective reorganization."

In support of this recommendation, the commission called attention to the fact that the "Long Island is the only Class I railroad in the United States that gets less revenue from freight than from passengers. . . . Commuting business, ordinarily, results in a loss. The Long Island carries more com-

muters than any other railroad in the country. . . . The average fare . . . is only 37 cents."

"Still another basic cause" of the railroad's difficulties, the report continued, "was the fact that when increased operating expenses resulted in heavy losses, the Public Service Commission, as then constituted, granted no increase in fares."

The commission further recommended elimination of future local real estate taxes on railroad property, and a drastic scaling down of past tax liabilities and of sums due the state of New York on account of grade crossing eliminations. On the former point, the commission pointed out that real estate and special franchise taxes "amount to about $4,200 for each mile of track," and that total real estate taxes rose from $1,310,000 to $3,370,000 between 1922 and 1950, with Nassau county taxes alone "increased over sevenfold, from $90,000 to $670,000." "Taxing districts," the report held, "must find ways of filling this gap in their financing."

As to grade crossing separation obligations, the commission found that "the Long Island owes the state, in matured and unmatured determinations, an undetermined amount estimated at $10 million. We propose that whatever remains of this debt to the state, after acquisition by the authority, be reduced or entirely eliminated."

Improvement Program

The commission also outlined a five-year improvement program, which it said "contemplates giving the traveling public the safest and best possible service, including modern safety devices, roadbed free from dust and cinders, clean and sanitary stations and air-conditioned and comfortable cars." Major elements in the program would be 300 new passenger cars, estimated to cost $45 million; $6 million for safety devices, installation of which is now being planned; $4 million for roadbed improvements; and $5 million for station improvements.

As stated above, the commission proposed that the authority which it recommended should be "to the greatest extent possible autonomous, unrestricted and independent, excepting the audit of the state comptroller"; it would "be clothed" with "the responsibilities now given to the Public Service Commission."

Employees, the report said, would be "necessarily state employees, and should be under the state civil service," but it saw "no difficulty in maintenance of membership in the brotherhoods and other labor organizations," and urged "that present retirement rights be preserved."

Other recommendations, "referred to the [present] trustee" for "action by him," were to the effect that present agreements between the Long Island and the New York Connecting for trackage rights, and between the L. I. and the Pennsylvania for use of the latter's East River tunnels and Pennsylvania Station and for car floating in New York Harbor be renegotiated with a view to obtaining more money for the L. I.; that traffic, accounting and freight claim work now done by the P.R.R. be done on the L. I.; that recent real estate sales be reexamined, and that no property adjacent to stations and available for parking be sold. "Complete separation" of the L. I. from the P.R.R. also was suggested.

The report was to be the subject of an open hearing scheduled on January 26 at Mineola, N. Y. It was indicated that commuter opposition to any fare increase might come up at that time, while brotherhood opposition to the civil service proposals had already been reported before this issue of *Railway Age* went to press. Up to that time there had been no comment from the governor, but there were indications that the report would produce a legislative wrangle at Albany.

Fiscal 1950 Was Year Of Many Strike Threats

Mediation Board reviews conditions in annual report

In the fiscal year 1950 there were more threatened strikes in transportation than in any year since passage of the Railway Labor A t, the National Mediation Board said in its annual report to Congress. The report, which reviewed labor-management relations in the railroad industry for the year ended June 30, 1950, pointed up several problems which "disturbed" the board during the year.

These problems, the board said, include the use of strike threats which short-circuit intended procedures of the Railway Labor Act; the "apparent reluctance" of both carriers and labor organizations, in national cases, to conduct thorough collective bargaining; and the large number of cases deadlocked by the National Railroad Adjustment Board which require the services of referees.

The board found that the more prominent disputes in the railroad industry during the 1950 fiscal year "were those in connection with the manning of diesel-electric locomotives and the establishment of the 40-hr. week." It noted that 13 railroad strikes, including one against the Railway Express Agency, occurred during the year, and, as the year closed, serious disputes existed involving the 40-hr. week for yard service employees and provision for paying train-service employees on a graduated scale principle based upon the weight on drivers of locomotives.

"Short-Circuiting" Labor Act

Discussing the matter of short-circuiting procedures of the Railway Labor Act, the board said its policy is to refuse to accept cases for mediation when such cases should properly go to the Adjustment Board. It added, however, that when this procedure is not followed, and a strike is threatened instead, "mediation or emergency board handling is then required."

Six of the 11 presidential emergency boards named during the year were created to investigate threatened strikes over grievances which, under the law, should properly be disposed of by the Adjustment Board's First Division, the board said. It commented that this failure of the parties to comply with the "very complete procedural provisions" of the act leads to a weakening of other sections of the act.

The board added that threats of work stoppages on grievance matters "strike at the very heart of the intent of the act," and recommended that top railroad executives and the operating brotherhoods hold a conference "to devise some workable methods for eliminating this log jam" before the Adjustment Board.

This "log jam" increased during fiscal 1950 from 2,842 cases on July 1, 1949, to 3,170 cases on June 30, 1950. During the year the First Division settled 1,438 disputes, while 1,766 new cases were docketed. It was in commenting on this backlog of cases that the Mediation Board said it was "further disturbed" by the number of deadlocked cases which require the appointment of a referee.

"The party representatives on the various divisions of the adjustment board are experts in their particular fields and it does appear that there could be a greater degree of agreed

B. J. Tarbutton Elected President of C. of Ga.

Ben J. Tarbutton, president of the Sandersville since 1922, has been elected president of the Central of Georgia to succeed Merrel P. Callaway, who will continue as chairman, a position he has held since the road's reorganization on July 1, 1948. Earle F. Bidez has been elected vice-president, a promotion from the position of executive assistant.

dispositions by and between them and thereby minimize the very large number of deadlocks which regularly occur," the board said.

Turning to the problem of the failure of the parties to conduct "thorough collective bargaining," the board said each side apparently feels that the responsibility for the disposition of all such cases should be attached to some other source.

"There are situations from time to time where the employees express a deep concern that the employer has operated under a feeling of assurance that they would be protected by the government against any use of their economic power, and that such feeling has operated to make negotiations an empty gesture," the board said. "On the other hand, the carriers have from time to time expressed the feeling that real negotiations could not be conducted with employees because they desire to force the use of section 10 (emergency board) and accept the provisions of emergency board reports which they considered favorable and reject such portions they may deem unfavorable. If the feelings of the respective interests have factual substance, both are contrary to the spirit and intent of the law."

Major 1950 Strikes

Other sections of the board's report were devoted to strikes that occurred during the year. Mention was made of the strike on the Missouri Pacific in September, 1949, which the board called "one of the most costly . . . in the history of American railroading." This strike, which involved grievance disputes, lasted 45 days. The board also mentioned the strike by the Brotherhood of Locomotive Firemen & Enginemen which began on May 10, 1950, and involved the demand for an additional fireman on diesel-electric locomotives. The third major strike during the fiscal year occurred in June, 1950, when the Switchmen's Union of North America began a strike against five western roads. This stoppage arose out of a demand by the union for a 5-day, 40-hr. week for yardmen.

In addition to these cases, there were other movements under way which attracted public attention during 1950 and which were still pending on June 30. Emergency boards were created to investigate disputes involving the Order of Railway Conductors and the Brotherhood of Railroad Trainmen, as well as the switchmen's union. The O.R.C.-B.R.T. case reached the strike-threat stage in August, after the close of the 1950 fiscal year.

During 1950, 11 emergency boards were created, all of them having to do with railroad disputes. In the same period 20 arbitration agreements were entered into, as compared with nine the previous year. In summarizing its year's work, the N.M.B. found that it handled 362 cases of all kinds in 1950. In 1949 it handled 449 cases, and in 1948, 464. Included in the 1950 total were 234 mediation cases and 128 representation cases. Of the 1,438 cases disposed of by the adjustment board's First Division, 221 were decided without a referee; 669 were decided by use of a referee, and 548 cases were withdrawn.

Fiscal 1950 Reviewed By Bureau of Safety

Reports on inspection of equipment and other activities

The annual report of Director S. N. Mills of the Interstate Commerce Commission's Bureau of Safety for the fiscal year ended June 30, 1950, has been submitted to the commission and sets forth in the usual form the results of inspection of safety-appliance equipment on railroads, together with information on hours of service of railroad employees, installation and inspection of signal systems, interlocking and automatic train-stop and train-control devices, investigation of accidents, prosecutions for violations of railroad safety laws and other activities of the bureau.

During the year under review, 1,149,879 freight cars, 29,533 passenger-train cars and 12,647 locomotives were inspected, as compared with 1,072,219 freight cars, 27,481 passenger-train cars and 12,044 locomotives in fiscal 1949. Of the 1950 total, 3.37 per cent of the freight cars, 3.74 per cent of the passenger-train cars and 3.41 per cent of the locomotives were found to be defective, as compared to the respective 1949 figures of 3.21 per cent, 3.28 per cent and 4.12 per cent.

Air brakes tested on 2,826 trains (consisting of 124,708 cars) prepared for departure from terminals were found operative on 124,576 cars, or 99.9 per cent. This percentage was attained, however, after 2,364 cars having defective brakes had been set out and repairs had been made to brakes on 2,045 cars remaining in the trains. Similar tests on 1,530 trains arriving at terminals with 85,135 cars showed that air brakes were operative on 97.8 per cent of the cars and that an average of approximately 1.2 cars per train were not controlled by power brakes.

According to the report, 703 reporting railroads and private car lines, which collectively own 2,152,320 freight cars, have equipped 1,907,812 such cars with power brakes which comply with specifications set out in the commission's September 21, 1945, order, as amended August 27, 1948, October 10, 1949, and October 10, 1950. (See *Railway Age* of October 21, 1950, page 44.) As of June 30, 1950, 89.8 per cent of railroad-owned cars, and 80.5 per cent of cars owned by private car lines, were equipped. In the matter of geared hand brakes, the report noted that the Association of American Railroads has issued certificates of approval for 28 types — 15 vertical wheel types, 10 horizontal wheel types, and 3 lever types.

Hours of Service

During the fiscal year 1950, 174 of the 667 railroads filing hours-of-service reports reported 7,157 instances of all classes of excess service, a decrease of 11,986 as compared with the previous year. The 1950 figure included 1,761 instances of excess service by train-service employees subject to the 16-hr. provision of the law, and 5,396 instances of excess service by operators and other employees subject to the 9-hr. and 13-hr. provisions of the law.

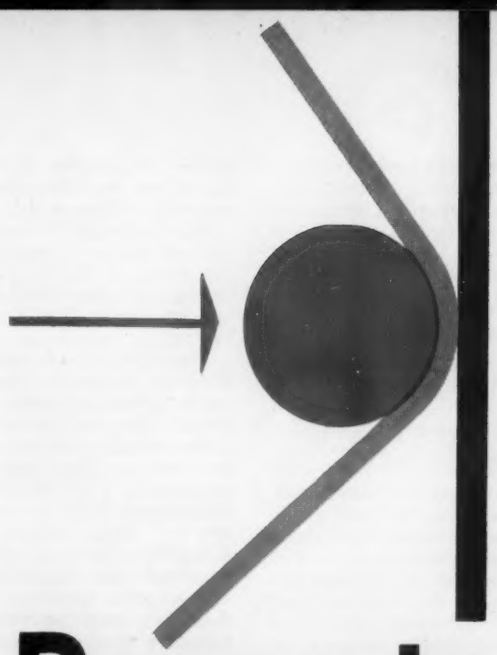
Landslides, high water, fire and adverse weather conditions, wrecking and relief service and collisions and derailments were the principal reasons for 1,485 instances (as compared with 2,959 in 1949 and 5,107 in 1948) which caused train-service employees to remain on duty longer than 16 consecutive hours. Sickness, death and personal injury accounted for 3,842 of the 5,396 instances of excess service by operators and dispatchers. The latter figure compares to 15,740 instances for fiscal 1949.

During the year, 147 cases of violation of safety-appliance laws, comprising 454 counts, and nine cases of violation of the hours-of-service law, comprising 14 counts, were transmitted to United States attorneys for prosecution.

Signals and Communications

As of January 1, 1950, there were 106,499.7 mi. of road (139,241.6 mi. of track) equipped with block-signal systems, including automatic block signals on 76,487.7 mi. of road (108,052 mi. of track). On the same date, there were 4,509 interlockings in operation and 11,034.9 mi. of road (21,449.2 mi. of track) equipped with automatic train-stop, train-control and cab-signal devices.

According to reports submitted by the carriers, there were 59 train communication systems in service on lines of 32 different railroads on January 1, 1950, midway of the fiscal year. Included in these systems were five installations providing radio telephone service for passengers through telephone company mobile radio facilities. There were also 111 installations in service in yards and terminals on 50



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railroads, with 105 of such installations providing communication between fixed stations and switching engines. Six of the installations provide communication between fixed stations and portable pack radios used in different yard operations.

Of the 45 collisions investigated by the Bureau of Safety, 29 occurred on lines operated by the block system, 11 on lines operated by the timetable and train-order system, and five in locations where yard and miscellaneous operating rules were in effect. The collisions resulted in death of 74 persons and injury to 1,159. The bureau also investigated 22 derailments, which resulted in death of 26 persons and injury to 500. In seven accident reports, the bureau recommended in five cases "that carrier provide adequate protection for movements of track motorcars"; in another case, "installation of an adequate block system"; and in the other, "installation of electric switch locking at main-track hand-operated switches in automatic block-signal territory."

During the calendar year 1949 there were 3,523 accidents at highway grade crossings, which resulted in death of 1,507 persons and injury of 3,774. There were 39 derailments of trains as a result of collisions with automobiles, resulting in death of 16 persons and injury to 46. Of the total casualties from derailments and other train accidents at highway grade crossings, four persons killed and 66 injured were railroad passengers, employees, and persons carried under contract.

Illinois Roads Map Civil Defense Setup

Told they must work out own formulas; other regions lag

Under the guidance of State Civil Defense Director Lenox R. Lohr, presidents and other top executives representing 39 major railroads of Illinois met on January 10 at Chicago to evolve procedures for keeping the state's rail network functioning after an atomic bomb attack, sabotage or other hostile action.

Railroads are of vital importance in almost every phase of the state's civil defense plan, Major Lohr explained. And, he added, because problems of civil defense planning for disaster have not been worked out by federal authorities, plans which Illinois railroads formulate will be of great interest, not only to federal authorities, but to the railroads of the rest of the nation as well. (Plans for operation of railroads within the Chicago metropolitan area in the event of a bombing attack were described in the December 23 *Railway Age*, page 20.)

To show clearly the magnitude of the task which railroads would face in the event a single atomic bomb is touched off over a metropolitan area, Major Lohr listed some of the bomb's effects:

Thousands buried alive in collapsed buildings (immediate need for heavy earth moving equipment); roads and streets blocked by debris (previous bombs did not fall on vertical cities); thousands needing immediate first aid and hospital attention, with most principal hospitals destroyed and staff personnel and large numbers of physicians killed (need for mass evacuation of injured to other metropolitan areas); a lack of whole blood and blood plasma, drugs, dressings and other equipment necessary to save life (supplies must be rushed in from other centers); contamination from broken sewer lines with possibility of pestilence; gas mains broken and electrical power disrupted; water supply and food contaminated and unsuited for use (evacuation of thousands to other areas); housing, food and clothing needed for thousands of homeless (and their eventual relocation to new areas); saboteurs operating under cover of confusion to damage plants, transportation and communication facilities over wide areas.

Warns of Sabotage

Major Lohr strongly emphasized also the danger which railroads face from sabotage. "The state has been advised by the Federal Bureau of Investigation that there are probably some 5,000 trained saboteurs in Illinois alone, ready to strike under cover of general confusion at bridges, power plants and other strategic installations which might otherwise escape harm and which would be of vital, post-disaster importance," he said. "The railroads must arrange their own protection of such points."

General D. O. Elliott, a member of the Illinois civil defense staff, warned the railroad officers against "channelizing of thought exclusively on the atomic bomb." Other weapons may be used, he said, which could deal a staggering blow if no preparation is made to anticipate them. General Elliott echoed Major Lohr's warning of sabotage, adding that railroads and their vital communication lines are particularly vulnerable to this form of warfare. He urged that the railroads consider immediate organization of their police forces to cope with questions of mutual protection and explore sources of suitable "deputies" to augment regular staffs.

Must Revise Thinking

The railroads must also revise their thinking with regard to a possible disaster and their operation from "railheads" which are planned in advance, General Elliott continued. "Nobody knows when, where or how disaster may strike," he said, adding that, even

WHITE HOT and weighing nearly 130,000 lb., this Canadian steel ingot is being lowered onto a specially insulated Canadian National flat car for a 200-mi. trip from Sydney, N. S., to Trenton, where the Trenton Steel Works will use it in manufacture of heavy machinery. Shipment of these white-hot ingots has been made possible through use of vermiculite, a mica-like insulating material manufactured by the Zonolite Company of Chicago. The ingot is being laid on pre-molded supports in the shipping box, which is shown mounted on the flat car. All remaining space within the box is filled with vermiculite (some of which may be seen in the bottom of the box) and the car thereupon turned over to the railroad for handling. Despite the 1,600-deg. temperature of the ingot, the shipping box, when tested, was found to be no warmer than the air surrounding it. The Dominion Iron & Steel Co., which shipped the first hot ingot on December 21, has announced that the practice will become permanent, and has already become "routine." Extra freight costs are said to be more than offset by elimination of controlled cooling at Sydney, reheating at Trenton and improved quality of the steel because of the elimination of internal stresses and strains (See *Railway Age* of January 22, page 34)

though it is known which areas would constitute the best target for the enemy to aim at, the chance of his attaining this goal without a mishap are such that "we must not think in such limited terms."

Operation of railroads during the emergency must be left to the railroads themselves, General Elliott concluded. "For planning on a state level, this is the only feasible course, as the railroads' sphere of operations is much broader. It means, however, that a transportation section within the civil defense organization will have to be set up as quickly as possible."

President F. G. Gurley, of the Atchison, Topeka & Santa Fe, acted as chairman at the meeting, and immediately after the talks by Major Lohr and General Elliott opened the meeting for a general discussion. Mr. Gurley said he could not see how a good transportation approach to the problem could be made from the standpoint of small geographic units, as "a well coordinated contribution by transportation agencies requires broader concepts than state lines." Citing the lack of preparation in Washington, he said it would be necessary for the railroads to work with the state of Illinois alone until such time as thinking could be broadened to a regional, and perhaps a national basis. "The railroads' problem of planning is one that must be met at the chief executive level and each railroad must act largely for itself," he said.

Names Committee

Mr. Gurley named a committee based on "state, city and railroad community considerations" to work out the details of coordinating the roads within the state. In addition to himself, Mr. Gurley named Presidents T. D. Beven of the Elgin, Joliet & Eastern, H. C. Murphy of the Chicago, Burlington & Quincy, A. K. Atkinson of the Wabash, W. A. Johnston of the Illinois Central, and R. L. Williams of the Chicago & North Western, and Vice-President J. J. Brinkworth of the New York Central to serve on the committee. Among the tasks facing the committee will be to coordinate individual plans of the different roads within the state and the already established Chicago metropolitan plan, arrange alternative routing of traffic around potential disaster areas, and establish working pools of personnel, equipment, materials and resources for quick assembly and dispatch into crippled areas. It was pointed out from the floor that much of this work might have to be done without use of normal communication lines, hence the importance of advance preparation and coordination would be almost incalculable.

A total of 20 railroad presidents and 35 other executive railroad officers attended the meeting.

Railroad History Books

The School of Business at Indiana University believes it is evolving into a "production center" for histories of American railroads. Currently in process are histories of the Chicago, Indianapolis & Louisville and the Gulf, Mobile & Ohio, both under the direction of Professor L. L. Waters, author of the recently published history of the Atchison, Topeka & Santa Fe, "Steel Trails to Santa Fe." The university has disclosed that negotiations are currently under way for a history of "another large railroad serving Indiana."

Most railroad histories, Dr. Waters believes, have dwelt too much on the romance, construction and financing of the roads. "Besides these features," he says, "we hope to cover every other aspect of the business—labor relations, strikes, tie treating, ballasting, train control, stock market ups and downs, freight solicitation, loss and damage claims, hoboes and deadheads. We hope that our histories already published and those under way are the first in a long line on American railroads." Candidates for Ph.D. degrees in transportation, he disclosed, are compiling the histories as their doctoral theses.

Rail-Barge Joint Rates Deferred Again by I.C.C.

The Interstate Commerce Commission has further postponed, from March 1 until September 1, the effective date of its order requiring railroads and water carriers on inland waterways to establish through routes and joint rail-water rates reflecting differentials under all-rail rates.

The postponement order noted that on January 2, the Supreme Court upheld the I.C.C. by refusing to set aside the original order. (See *Railway Age* of January 8, page 46). It added that the work of checking the routes and rates and filing tariffs in compliance with the order "would be of such magnitude that a period of six months should be allowed."

Gass Reports New Cars Now Exceed Retirements

During the month of December, 1950, for the first time since June 1949, Class I railroads installed more new freight cars than were retired, Arthur H. Gass, chairman of the Car Service Division, Association of American Railroads, said in his latest review of the "National Transportation Situation."

This marks the first upward curve on the car ownership chart in a period of 18 consecutive months, Mr. Gass said. He added that it is reasonable to expect further gains in ownership throughout 1951 as the car-building program gains momentum. Mr. Gass reported that the ownership increase in December amounted to 365 cars.

A further reduction of about 4,000 in the number of unserviceable cars was reported by Mr. Gass for the month of December. He said the bad-order percentage now stands at 5.2 per cent of ownership, and since some 30 roads have not yet attained the goal of a 5 per cent maximum, the present trend of constant reduction will probably continue. There were 93,840 cars held for repairs on January 1, 1951, as compared to 140,946 on January 1, 1950.

The stepped-up car repair programs have thus contributed about 47,000 cars to the available supply since January 1 last year, Mr. Gass noted. Included in this total were 18,000 box cars, 16,000 gondolas and 9,000 hoppers.

The equipment data presented by Mr. Gass showed Class I roads as having a backlog of 114,240 cars on order January 1, 1951. This compares with 14,368 on order a year ago. Mr. Gass pointed out that American Railway Car Institute figures showed a backlog of 124,489 cars on order January 1 this year, but these institute figures include all domestic purchasers, including 7,694 private tank cars.

Meanwhile, in other sections of his review, Mr. Gass discussed the car situation as to the supply of various types of cars. He found that box cars are "extremely tight" in every section of the country, that "some rather severe shortages" of hoppers are being reported, and that gondola car supply difficulties are particularly pronounced in eastern steel loading districts.

"Demands for box cars are at a high level and prospects are that it will be necessary to continue for some time the allocation of the available supply," Mr. Gass said. He added that everything practicable is being done to increase the movement of empty box cars to western lines, where the shortages have been most acute. He also called attention to Special Car Order No. 76, which became effective January 10, and which requires U. S. roads to load Canadian box cars only in the direction of their owners or else return them empty.

As to open top cars, Mr. Gass said it "appears likely" that hoppers "will be in very heavy demand throughout 1951." Gondolas will doubtless continue in short supply "until such time as ownership can be increased." Mr. Gass said the high level of steel production, and the further expansion of productive capacity by that industry, will keep the demand for gondola cars high.

The all-rail movement of ore from the northwest to the Pittsburgh-Youngstown-Chicago districts is now in progress, Mr. Gass reported. This movement, which is expected to account for about two million tons by April 1, will supplement the 1950 lake ore program. The latter was 2 per cent short of requirements at the end of the navigation season December 11.

Revenue coal loadings in 1950 amounted to 7,241,163 cars, an increase of 14 per cent over 1949, according to the C.S.D. chairman. Toward the end of 1950 there was a heavy increase in export movements of coal to overseas

(Continued on page 47)

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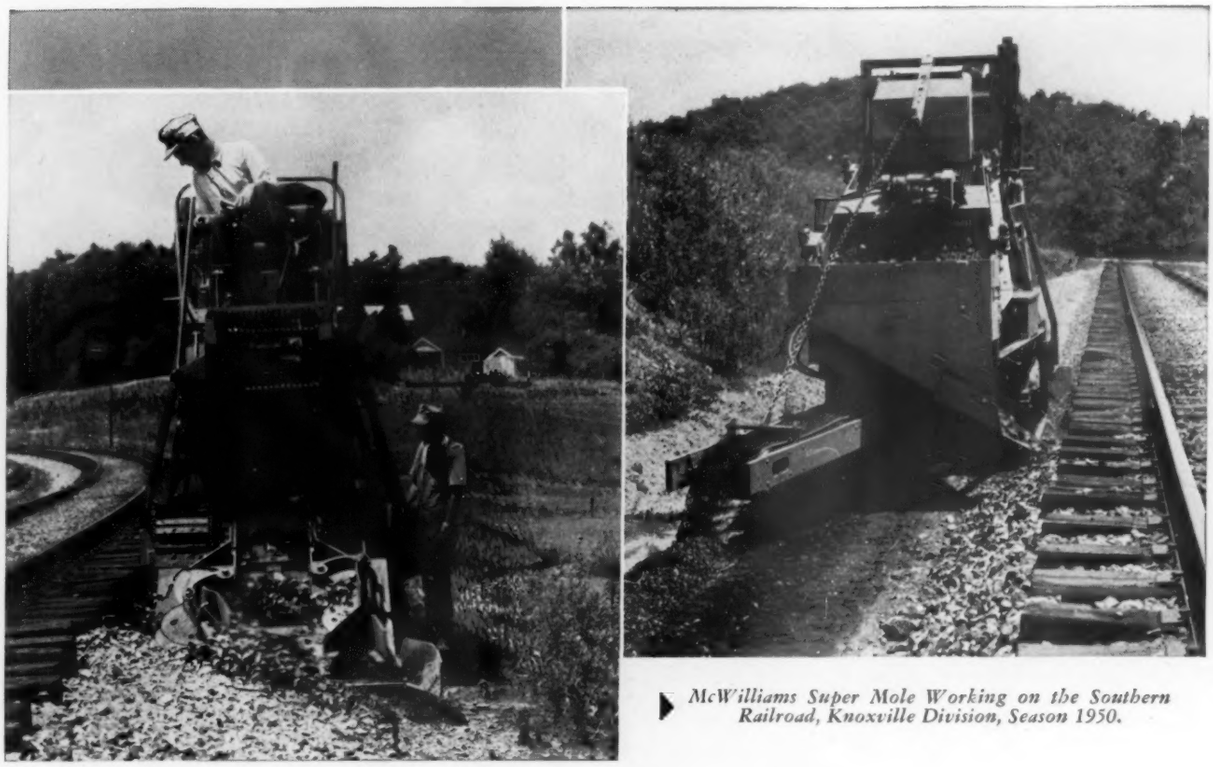

McWilliams Super Mole Working on the Southern Railroad, Knoxville Division, Season 1950.

Now You Can Clean Track Shoulder at 1,500 Feet Per Hour at Less Than 3½ Cents Per Foot

You get new cleaning economy with the McWilliams Super Mole because now with only one operator and one helper you get fast, off-track cleaning on a mobile unit. The Super Mole excavates and cleans at speeds ranging from 800 ft. to 4,000 ft. per hour—at a cost of less than 3½ cents per foot. It is crawler mounted to give ease of crossing road beds, highways and maneuvering around obstructions. To learn more about the economy of road bed maintenance with the Super Mole write to Railway Maintenance Corporation, P.O. Box 1888, Pittsburgh, Pa.

SPECIFICATIONS

5 traveling speeds—1.5 to 5.4 M.P.H.

5 excavating and cleaning speeds—800 to 4,000 ft. per hr.

Length—20′ 0″

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Digging Width—5′ 0″

Width over treads—4′ 4″

Width of tread—12″

Engine—4-cycle diesel

Governed speed—1450 R.P.M.

Total weight—16,000 lbs.

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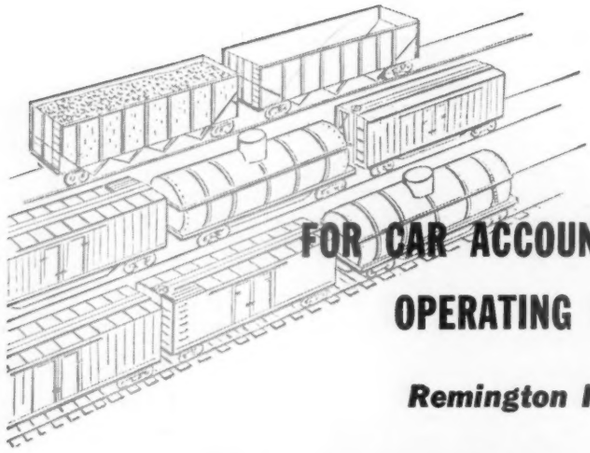

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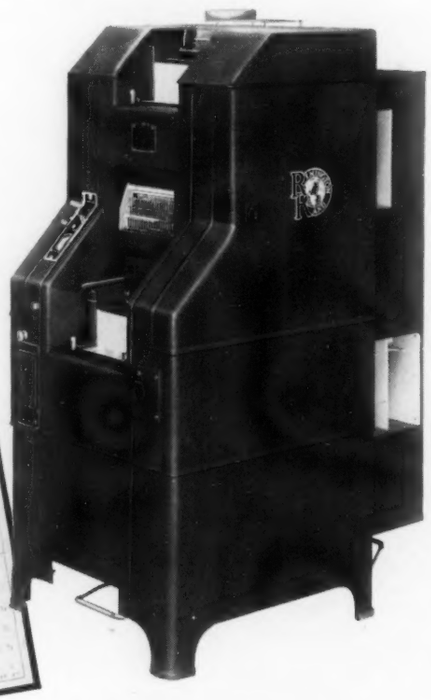

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Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended January 20 were announced by the Association of American Railroads on January 25 as follows:

	Surplus	Shortage
Plain Box	239	12,572
Auto Box	53	110
Total Box	292	12,682
Gondola	1,060	3,597
Hopper	222	3,665
Covered Hopper	0	47
Stock	1,627	0
Flat	382	528
Refrigerator	1,129	0
Other	210	203
	4,922	20,722

(Continued from page 41)
destinations, while the year's shipments to Canada exceeded those of 1949 by approximately 5.9 million tons. The lake coal program was also more than fulfilled with a 103.3 per cent performance for the year, Mr. Gass said.

Average turn-around time of freight cars in December, as reported by Mr. Gass, was 16.11 days. The comparable figure for December 1949 was 18.47 days. On the basis of reports from 760 cities in all 13 shipper board districts, cars detained beyond the free time of 48 hours averaged 16.31 per cent of those placed in December. This compared with 14.71 per cent for November, and 20.11 per cent in December 1949. The average detention for the year 1950 was 19.29 per cent, compared to 17.92 per cent for 1949.

I.C.C. Holds Further Hearing on Reparations

Division 4 of the Interstate Commerce Commission concluded on January 22 six days of public hearings which were devoted to cross-examination of railroad witnesses who had submitted evidence in answer to the federal government's complaints in 12 of the so-called reparations cases. The 12 cases, like five other pending proceedings, arose out of complaints whereby the government is seeking to recover alleged overcharges which it claims the railroads assessed on its shipments of various commodities during World War II.

The hearings were held at the commission's Washington, D. C., headquarters. The railroad evidence was embodied in some 70 verified statements totaling more than 2,000 mimeographed sheets, not including exhibits which were also voluminous.

The complaints are being handled for the government by the Department of Justice, and members of its staff of attorneys conducted the cross-examinations of the railroad witnesses. Most of the latter were presented as "operating witnesses," although there was testimony relating to rates and traffic volume, as well as operating conditions, with respect to the shipments involved in the complaints.

The 12 cases included four on which government evidence in support of the complaints was received at hearings held last May. Those are: No. 29572, wherein the complaint assails tariff regulations and practices under which crated automobiles moving from origins in Central Freight Association territory to Gulf and South Atlantic ports for export were denied commodity rates applicable to "boxed" automobiles; No. 29917, wherein the complaint assails domestic rates paid on transcontinental shipments of combat vehicles; No. 29926, wherein the rates paid on shipments of wooden pallets are attacked; and No. 30076, wherein the complaint assails charges paid on shipments of materials and supplies which were stored in transit at Marietta, Pa., and Guilderland Centre, N. Y.

The other eight cases included three in which the government's evidence was received at hearings last June, and five in which the government presentations were made at September, 1950, hearings. These are: Nos. 29853, 29920, 29930, 29822, 29861, 29761, and 29875, wherein the complaints assail, in turn, charges paid by the government on shipments of tents and tarpaulin, bomb-cluster adapters, woolen blankets, ammunition and explosives, small-arms ammunition, airplanes, and airplane parts, and steel ammunition links and cartridge clips. Also No. 29918, wherein the complaint assails charges paid by the former United States Maritime Commission on shipments of iron and steel articles from Minnequa, Colo., to destinations on the Pacific Coast.

Further hearing in these 12 cases will be held May 9. April 2 was fixed as the date by which the Department of Justice must serve its rebuttal evidence on the railroads. The railroads will then have until May 1 to serve surrebuttal evidence, while the government's reply to the latter will be due May 6. It is anticipated that the sessions beginning May 9 will conclude the public-hearing phase of these reparations cases. Hearings in the remaining five proceedings were concluded last March, as reported in *Railway Age* of March 25, 1950, page 64.

N.P.A. Acts to Assure Delivery of Car Steel

The National Production Authority issued a January 17 order which established a procedure "to assure the prompt delivery of steel products needed for the production of new freight cars at the rate of 10,000 per month." The order is N.P.A. Order M-1, Supplement 1 as amended January 17, 1951.

As the N.P.A. announcement put it, the action supplements that which N.P.A. took sometime ago to allocate steel for the construction and repair of freight cars. It will authorize purchasers to order the amounts of materials necessary to meet their contracts under the freight car program.

"The new procedure," N.P.A. explained, "is designed to keep the flow of orders in line with production schedules in the car shops. In placing certified orders, purchasers will specify exactly the kind and amount of materials needed, and the period during which shipment is required. Each order is required to carry a certification by the purchaser stating that the purchase has been authorized by N.P.A. and the materials ordered will be used only in connection with the freight car program."

Express Rate Case Is Ex Parte No. 177

The Interstate Commerce Commission has issued an order instituting an investigation of the rate-increase proposal filed recently by the Railway Express Agency. The order docketed the investigation proceeding as Ex Parte No. 177, and stated that the times and places of public hearings would be announced later. (See *Railway Age* of January 22, page 35.)

I.C.C. Clarifies Scope Of New Class-Rate Case

The Interstate Commerce Commission's class rate investigation into rail, water, and rail-water rates between Mountain Pacific territory and the remainder of the United States "would not seem" to embrace port-to-port all-water rates. This opinion was expressed recently by Commissioner Aitchison in response to an inquiry from the New York Port Authority.

The proceeding, docketed as No. 30660, was instituted by the commission by an order dated August 17, 1950. (See *Railway Age* of September 2, 1950, page 75). In replying to the Port Authority, Commissioner Aitchison said the investigation relates to common carriers "subject to Part I of the Interstate Commerce Act."

Senate, House Committees Named For 82nd Congress

New committees on Interstate and Foreign Commerce for the first session of the 82d Congress have been appointed in both the Senate and the House. There will be no change in the chairmanship of either committee, with Senator Johnson, Democrat of Colorado, remaining as head of the Senate group, and Representative Crosser, Democrat of Ohio, heading the House committee. While there is no change in the number of members on the Senate committee, the House group has been increased from 28 to 30.

Party representation on the Senate committee will consist of seven Democrats and six Republicans, as compared with 7 and 5 respectively in the 81st Congress. On the House side, Repub-

lican membership on the Interstate committee has increased from 11 to 13, while the Democrats retain 17 members.

Other committee changes for the new Congress include the appointment of Senator Murray, Democrat of Montana, as chairman of the Committee on Labor and Public Welfare. Senator Murray replaces former Senator Thomas of Utah, who was defeated for reelection. In the Senate, the Labor and Public Welfare committee handles all labor legislation and social security matters, including those relating to the Railroad Retirement Board.

Chairman Johnson of the Senate Interstate Committee succeeds the former Senator Myers of Pennsylvania as chairman of the special subcommittee investigating domestic land and water transportation pursuant to Senate Resolution 50. In addition to the chairman, other members of the subcommittee at present are Senators Johnson, Democrat of Texas; Hunt, Democrat of Wyoming; O'Conor, Democrat of Maryland; Capehart, Republican of Indiana; Bricker, Republican of Ohio; and Kem, Republican of Missouri.

Members of the Senate and House Interstate and Foreign Commerce committees are as follows:

SENATE

Democrats:
Edwin C. Johnson, Colorado, Chairman
Ernest W. McFarland, Arizona
Warren G. Magnuson, Washington
brien McMahon, Connecticut
Herbert R. O'Conor, Maryland
Lyndon B. Johnson, Texas
Lester C. Hunt, Wyoming

Republicans:
Charles W. Tobey, New Hampshire
Homer E. Capehart, Indiana
Owen Brewster, Maine
John W. Bricker, Ohio
John Williams, Delaware
James P. Kem, Missouri

HOUSE

Democrats:
Robert Crosser, Ohio, Chairman
Lindley Beckworth, Texas
J. Percy Priest, Tennessee
Oren Harris, Arkansas
Dwight L. Rogers, Florida
Arthur G. Klein, New York
Thomas B. Stanley, Virginia
John B. Sullivan, Missouri
William T. Granahan, Pennsylvania
John A. McGuire, Connecticut
Thomas R. Underwood, Kentucky
F. Ertel Carlyle, North Carolina
John B. Williams, Mississippi
Peter F. Mack, Jr., Illinois
Homer Thornberry, Texas
Louis B. Heller, New York
Kenneth A. Roberts, Alabama

Republicans:
Charles A. Wolverton, New Jersey
Carl Hinshaw, California
Leonard W. Hall, New York
Joseph P. O'Hara, Minnesota
Wilson D. Gillette, Pennsylvania
Robert Hale, Maine
James I. Dolliver, Iowa
John W. Heselton, Massachusetts
Hugh D. Scott, Jr., Pennsylvania
John B. Bennett, Michigan
Richard W. Hoffman, Illinois
J. Edgar Chenoweth, Colorado
John V. Beamer, Indiana

"Ops" Wage Case Goes Back to Mediation Board

Return of the railroad operating employees wage and rules case to the National Mediation Board was the immediate result of the January 18 conference between chief executives of the "big four" brotherhoods and Dr. John R. Steelman, assistant to President Truman. That was the conference at which the labor leaders formally advised Dr. Steelman that the general chairmen of their unions had rejected the so-called Steelman formula for settling the controversy.

The rejections came after the brotherhood executives had joined management representatives in signing a memorandum of agreement embodying the formula. (See *Railway Age* of January 15, page 238, and December 30, 1950, page 36.) That the railroads thought the memorandum of agreement was a firm committment was indicated by a newspaper advertisement which appeared this week.

The advertisement reproduced the memorandum, including the signatures which were those of the following: J. P. Shields, grand chief engineer, Brotherhood of Locomotive Engineers; D. B. Robertson, president, Brotherhood of Locomotive Firemen & Enginemen; R. O. Hughes, president, Order of Railway Conductors; W. P. Kennedy, president, Brotherhood of Railroad Trainmen; and L. W. Horning, D. P. Loomis, and C. D. Mackay, chairmen, respectively, of the Eastern, Western, and Southeastern carriers' conference committees.

"The railroads respect . . . the union leaders seek to repudiate this agreement," the advertisement asserted.

The Mediation Board has conferred with the parties about the case since it came over from the White House, but there was no indication of progress toward settlement. Meanwhile, N.M.B. also has before it for mediation the case involving demands of non-operating employees for a wage increase of 25 cents per hour.

Pan American Railway Congress Group Meets

A review of the proceedings of the Seventh Pan American Railway Congress in Mexico City last October, plans for the eighth congress to meet in the United States in 1953, and several appointments highlighted a meeting of the United States National Commission in the Pan American Railway Congress Association held in Washington, D. C., on January 18. President William T. Faricy of the Association of American Railroads, who is chairman of the commission, presided.

Reports of the U. S. d legation to the seventh congress were submitted and discussed, and these will be summarized in a report which Mr. Faricy will make to the Department of State. Consideration was given to plans for the eighth congress, and it was decided to name at a later date an organizing committee which will have charge of arrangements. Further action will be taken at the next meeting of the U.S. commission, which has been tentatively set for June 26.

Thomas S. Campen, commercial attache of the U.S. Embassy at Buenos Aires, Argentina, was appointed a resident member of the U.S. commission on the permanent commission of the association in Buenos Aires, to succeed Kenneth N. Hynes, who will return to Washington for other duties. Charles W. Wright, president of the American Railway Car Institute, and George W. Baughman, assistant vice-president of the Union Switch & Signal Co., were named to the Industrial Advisory Committee of the U. S. commission.

Gen. Heileman Discusses Defense Transport Job

The job of defense transportation is one of coordination, of using all the means of transport in such a way as to insure the steady movement of men and supplies, Major General Frank A. Heileman, the army's chief of transportation, told students of the Third Annual Institute of Industrial Transportation & Traffic Management at an evening meeting January 23 in Washington, D. C. The institute, directed by Dr. L. M. Homberger, is sponsored by American University.

In a speech devoted to the role of the Transportation Corps in wartime, General Heileman praised the railroads and other carriers for their part in helping move supplies to Korea. He said they have done a "splendid job," and in so doing "have borne out the confidence I have always had in them."

I.C.C. Asked to Investigate Illinois Fares of Milwaukee

The Chicago, Milwaukee, St. Paul & Pacific has asked the Interstate Commerce Commission to institute an investigation of that road's intrastate passenger fares in Illinois.

Charging that it lost more than $1 million in suburban passenger operations in Illinois in the year ending September 30, 1950, the road said its intrastate fares are "unreasonably low" as compared with those of competing roads. It said tariffs proposing increases in these fares have been suspended by the Illinois Commerce Commission.

The road asked for authority to make "spot increases" to accomplish a uniform fare gradation between stations, and, when this is done, to raise the general level of such fares by approximately 25 per cent.

Freight Car Loadings

Loadings of revenue freight in the week ended January 20 totaled 779,816 cars, the Association of American Railroads announced on January 25. This was a decrease of 3,209 cars, or 0.4 per cent, compared with the previous week; an increase of 160,653 cars, or 25.9 per cent, compared with the corresponding week last year; and an increase of 69,979, or 9.9 per cent, compared with the equivalent 1949 week.

Loadings of revenue freight for the week ended January 13 totaled 783,025 cars; the summary for that week, as

The Revolutionary Car You've Read About... Made Possible By Douglas Fir Plywood!

FOR YEARS, Douglas fir plywood has been solving car-builders' problems. It has been used in building or re-building more than 100,000 railroad cars of every type.

Now it makes possible a revolutionary new type of car construction.

Pressed Steel Car Company, Inc., Chicago 2, Ill., turned to plywood in developing their now-famous Unicel —aptly called "the freight car of tomorrow, available today." This combination refrigerator-box car offers a long list of advantages of unusual importance to the nation's railroads and shippers.

Car building is only one of plywood's many railroad applications. It's used for maintenance and right-of-way buildings, in station construction, for signs, counters, track shims, booths, partitions, concrete forms. Get complete data from Douglas Fir Plywood Association, Tacoma 2, Washington. Field Offices: 848 Daily News Bldg., Chicago 6; 1232 Shoreham Bldg., Washington 5, D. C.; 500 Fifth Ave., New York City 18.

Check These Plywood Advantages Against *Your* Needs!

Douglas fir plywood is real wood, "engineered" to bring you:

- Great Strength; Rigidity; Dimensional Stability
- Light Weight; A High Strength-Weight Ratio
- Split-proofness; Tremendous Resistance to Impact
- Large Panel Sizes; A Wide Variety of Thicknesses
- Types: Waterproof-Bond Exterior, Moisture-Resistant Interior
- Several Appearance Grades Within Each Type
- Ease of Handling; Workability; Versatility of Application

Douglas Fir **Plywood**

AMERICA'S BUSIEST BUILDING MATERIAL

compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, January 13

District	1950	1949	1948
Eastern	142,145	116,190	138,313
Allegheny	159,055	126,565	155,937
Pocahontas ...	63,287	44,692	62,847
Southern	140,222	114,811	131,678
Northwestern ..	84,217	71,804	78,958
Central Western	128,669	101,583	106,362
Southwestern .	65,430	53,898	59,770
Total Western Districts	278,316	227,285	245,090
Total All Roads	783,025	629,543	733,865
Commodities:			
Grain and grain products	57,195	46,789	48,334
Livestock	10,611	11,264	12,411
Coal	168,774	114,583	163,797
Coke	15,950	11,592	15,733
Forest products	50,227	33,085	39,840
Ore	17,128	12,716	12,336
Merchandise l.c.l.	79,828	76,562	90,532
Miscellaneous .	383,312	322,952	350,882
January 13 ...	783,025	629,543	733,865
January 6 ...	662,444	505,753	721,507
Cumulative total 2 weeks	1,445,469	1,135,296	1,455,372

In Canada.—Car loadings for the week ended January 13 totaled 78,708 cars, compared with 62,594 cars for the previous week, and 65,267 cars for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
January 13, 1951 ..	78,708	34,308
January 14, 1950 ..	65,267	28,022
Cumulative totals for Canada:		
January 13, 1951 ..	141,213	64,489
January 14, 1950 ..	120,147	52,229

I.C.C. Won't Get Statistics On Water-Borne Traffic

Division 1 of the Interstate Commerce Commission has denied a railroad request to have water carriers file freight commodity statistics comparable to those filed by the railroads. The division refused to suspend its order of November 20, 1950, which set aside an earlier order of February 20. The latter order had provided for the reporting of commodity statistics for domestic water-borne traffic.

The request for continuing the water carrier reports came from E. R. Ford, secretary of the Committee on Statistics, Association of American Railroads. With the November 20 order due to become effective December 31, Mr. Ford urged the commission to hold the order in abeyance because the February 20 order would, if permitted to remain in effect, provide comparable freight statistics from the water carriers by origin and terminations.

Among the reasons given by Mr. Ford for continuation of the water carrier reports was that fully comparative commodity statistics for water and rail carriers "are necessary and essential to an intelligent analysis of traffic handled by these types of transport." He said water carrier reports to other federal agencies are based on different commodity classifications, and the use of two classifications for the same type of commodity statistics is "unsatisfactory statistical procedure."

The I.C.C.'s action in discontinuing the water carrier reports was taken at the request of the Bureau of the Budget. This bureau said the I.C.C. would be duplicating information developed by the Maritime Administration.

News Briefs . . .

. . . During its second fall-winter season on the air, the "Railroad Hour" had an average of 15 per cent more homes in its audience than it had during its first fall-winter season, according to figures compiled by the Nielsen Radio Index and just released by the Association of American Railroads, sponsor of the musical program heard every Monday night over the National Broadcasting Company network. "The increase in the show's audience," the A.A.R. said, "is especially significant in view of the fact that eight other musical and five other institutional programs decreased in popularity over the same period of time" and "because of the rapidly growing number of television sets in use."

. . . Because "trucks carrying heavy loads are not contributing their fair share for the construction and maintenance of the roads of Ohio," Governor Frank J. Lausche has recommended that the legislature of that state approve a ton-mile tax on heavy commercial trucks, or an increase in truck registration fees based on ton-miles transported. The governor's recommendation was based in part on results to date of the La Plata, Md., highway tests, which he said have "positively established that the large trucks with heavy cargoes definitely damage the highways far in excess of the proportionate gross weight of such trucks compared to the gross weight of ordinary motor vehicles." The proposed tax is said to be at the rate of one mill per mile on a 6,000-lb. truck, graduated upward to 10 mills for a 30,000-lb. truck and 22 mills per mile for a 60,000-lb. truck. Governor Lausche is also reported to have committed himself to ask for legislation which would make shippers, loaders, and truck owners jointly responsible with drivers for overloading.

December Gross Revenue 20.9% Above Last Year

From preliminary reports of 82 Class I railroads, representing 81.7 per cent of total operating revenues, the Association of American Railroads has estimated that December, 1950, gross amounted to $702,067,722, an increase of 20.9 per cent above the $580,591,781 reported for the same 1949 month. Estimated December freight revenue was $542,821,921, as compared with December, 1949's $469,473,313, an increase of 15.6 per cent. Estimated passenger revenue was $66,309,602, as compared with $62,107,266, an increase of 6.8 per cent. All other revenue was up 89.6 per cent—$92,936,199 as compared with $49,011,202.

ORGANIZATIONS

Smith Heads A.A.R. Communications Section

John R. Smith, of Washington, D. C., assistant to vice-president—communications of the Southern, has been elected 1951 chairman of the Communications Section of the Association of American Railroads. He succeeds retiring chairman R. C. Thayer, of St. Paul, Minn., superintendent telegraph of the Great Northern. C. O. Ellis, of Chicago, superintendent communications of the Chicago, Rock Island & Pacific, was chosen to succeed Mr. Smith as vice-chairman of the section.

The committee of direction has announced that Quebec, Que., has been selected as the place for the section's 28th annual meeting next October.

March 14 is the date for the next regular meeting of the **Ohio Valley Transportation Advisory Board,** in the Deshler-Wallick Hotel, Columbus, Ohio.

The **Miami Valley Traffic Club** will hold its 29th annual dinner on February 15 at the Miami Hotel, Dayton, Ohio. Vice-president Allen Goldsmith of the Mead Corporation will be the principal speaker.

Wayne A. Johnston, president of the Illinois Central, will be the guest of honor at a dinner in New York on February 8 of the **American Newcomen Society.** Mr. Johnston will be introduced by Eugene W. Stetson, Sr., chairman of the I.C.'s executive committee and a member of the New York committee of American Newcomen.

F. L. Partridge was elected president of the **Illinois Territory Industrial Traffic League** at the organization's annual meeting on January 19. Mr. Partridge is also executive secretary of the Burlington (Iowa) Shippers Association. Other officers elected were: I. L. O'Brien, assistant general traffic manager, Monsanto Chemical Company, St. Louis, Mo., first vice-president; W. E. Goldsmith, general traffic manager, R. G. LeTourneau, Inc., Peoria, Ill., second vice-president, and A. J. Maurer, assistant traffic director, Chicago Association of Commerce & Industry, re-elected secretary-treasurer.

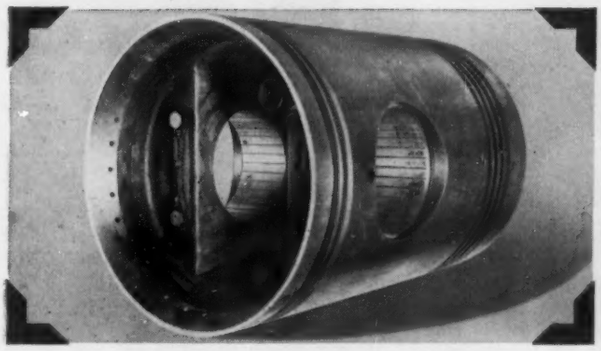
A Claim Prevention Night will be sponsored by the **Stock Yards District Traffic Club** (Chicago) on February 15. Chief Special Agent D. L. Wood of the Illinois Central, who was formerly associated with the Federal Bureau of Investigation, will be the

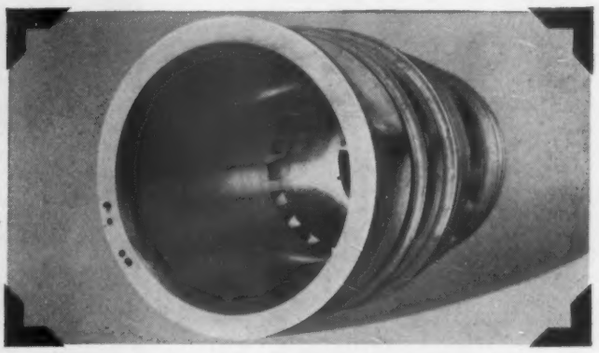
STANDARD ENGINEER'S REPORT

DATA

LUBRICANT RPM Delo Oil R.R.
UNIT Diesel Locomotive cylinder assembly
SERVICE Mountain Freight
LOCATION Transcontinental freight service on Moffat tunnel + Royal Gorge Routes
PERIOD In excess of 8 years
FIRM Denver + Rio Grande Western R.R.Co.

One million miles of service on cylinder liners and pistons





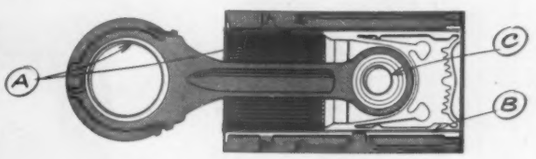
IN SERVICE APPROXIMATELY 1,000,000 MILES in Denver & Rio Grande Western Railroad diesel locomotive engines, this piston and cylinder liner were always lubricated with RPM DELO Oil R.R. At the end of that time wear measurements (inches) were only: Piston Skirt—0.001; Ring Grooves—No. 1—0.003 to 0.006, No. 2—0.002, No. 3 & 4—none; Cylinder liner (maximum diameter)—0.0095, (out of round)—0.002 to 0.004.

RPM DELO Oil R.R. has been the standard on the Denver & Rio Grande Western Railroad for over-the-road freight and passenger locomotives since their first power of this type was placed in service in January 1942. At the time this inspection was made approximately 49,563,104 miles had been traversed by the Rio Grande freight diesel fleet of 100 units and during that period only 77 cylinder liners had been scrapped for any reason. At that time many of the original pistons and cylinder liners were still in service and the average age of all these assemblies, including recently purchased power, was 4.7 years.

RPM DELO LUBRICATING OILS

TRADEMARK "RPM" REG. U.S. PAT. OFF.

How RPM DELO Oil R. R. prevents wear, corrosion, oxidation



A. Special additive provides metal-adhesion qualities...keeps oil on parts whether hot or cold, running or idle.

B. Anti-oxidant resists deterioration of oil and formation of lacquer...prevents ring-sticking. Detergent keeps parts clean... helps prevent scuffing of cylinder walls.

C. Special compounds stop corrosion of any bushings or bearing metals and foaming in crankcase.

FOR MORE INFORMATION about this or other petroleum products of any kind, or the name of your nearest distributor handling them, write or call any of the companies listed below.

STANDARD OIL COMPANY OF CALIFORNIA • San Francisco
THE CALIFORNIA OIL COMPANY • Barber, N.J., Chicago, New Orleans
STANDARD OIL COMPANY OF TEXAS • El Paso, Texas
THE CALIFORNIA COMPANY • Denver, Colorado

principal speaker. The meeting will be held at the Central Manufacturing District Club, 1106 West 35th st.

James K. Knudson, defense transport administrator, will speak on "Transportation and the Current Crisis," at the noon-day luncheon of the **Traffic Club of New York,** to be held on January 31, at the Hotel Biltmore.

The **Canadian Railway Club** will hold its annual dinner at Montreal, Que., on February 2.

SUPPLY TRADE

As reported in the December 16, 1950, *Railway Age*, **J. E. Vaughn** has been appointed vice-president in charge of all sales of the **Standard Railway Equipment Manufacturing Company** and its subsidiaries, with direct supervision over all sales offices. Mr. Vaughn was born at St. Louis, Mo., and attended St. Louis University. He has been associated with Standard and a predecessor for 27 years, having joined the P. H. Murphy Company at New Kensington, Pa., in 1923. He was serving as chief shop

J. E. Vaughn

inspector at New Kensington in 1929 when he was transferred to Chicago to become sales service engineer. In 1937 he was appointed assistant to the vice-president of Standard Railway Equipment at New York. He returned to Chicago in 1938, and in 1943 became assistant vice-president of that company, being appointed a vice-president of Standard in 1945. Mr. Vaughn became vice-president of the parent company, Standard Railway Equipment Manufacturing Company, in 1947, from which post he was recently promoted.

The **Union Switch & Signal Co.,** Swissvale, Pa., has appointed **J. K. Mickley** district manager of the Chicago district office to succeed **George Marloff,** retired. The company also has appointed **John M. Pelikan** assistant district manager of the New York district office; **James J. Van Horn** assistant district manager of the Pittsburgh, Pa., district office; and **Harry F. Kusick** supervisor of the transportation research department, at Swissvale.

Mr. Mickley, born in Copley, Pa., on April 27, 1893, was graduated from Penn State College in 1914 with a degree in mechanical engineering and shortly thereafter joined Union Switch & Signal. He worked in the general en-

J. K. Mickley

gineering department until 1924, when he was transferred to the Chicago district office. In 1940 he was transferred to the Swissvale office as district manager, the position he held at the time of his recent appointment.

Mr. Pelikan was born on February 7, 1902, and received his B.S. degree in electrical engineering from Carnegie Institute of Technology in 1924. He entered the apprentice course of Union Switch & Signal at Swissvale in October of that year and, in 1926, en-

John M. Pelikan

gaged in field construction work. He was transferred to the general engineering department in 1928 and in 1930 was sent to the U.S.S.R. as supervisory engineer for the installation of signal systems on Russian railways. He returned to the United States in 1932 to resume his duties in the general engineering department. He was appointed sales engineer in the Chicago district office in 1941 and sales engineer at the New York office in September, 1944, holding that position until his recent appointment.

James J. Van Horn

Mr. Van Horn was born at Philadelphia, Pa., on September 12, 1902, and was graduated from Villanova College in 1925 with a B.S. degree in electrical engineering. He worked for the Union Switch & Signal Construction Co. during summer vacations and, after graduation, on a full time basis. In 1926 he entered the general engineering department of Union Switch & Signal and, in 1944, was appointed sales engineer in the Pittsburgh district office, the position he held at the time of his present appointment.

Harry F. Kusick

Mr. Kusick was born at Ithaca, N. Y., August 28, 1902. He was graduated from the University of California in 1924 with an A.B. degree, and in 1928 received an M.B.A. degree from Harvard University. He joined Union Switch & Signal's general engineering department in February, 1928. Transferred to the transportation research department when that department was formed in 1941, he continued in the same work until his recent appointment.

Charles W. Beauchamp, assistant sales manager for silent chain drives at

the **Link-Belt Company's** Ewart plant, Indianapolis, Ind., has been appointed assistant sales manager at that plant for both silent and roller chain. **H. Merrill Bowman,** assistant sales manager at the company's Pershing Road plant, Chicago, has been appointed to a similar position at the Ewart plant, for Ewart general products.

The **Caterpillar Tractor Company,** Peoria, Ill., has established an additional sales division to be known as the plains division. The new unit gives the company four administrative sales divisions: Western, central, plains and eastern. The plains division will

Kenneth F. Ames

consist of territory formerly under the central division, which will take over part of the eastern division. To staff the new organization, the following promotions have been announced: **Kenneth F. Ames,** former head of sales training, has been appointed sales manager of the plains division; **Lee**

Lee Morgan

Morgan, former supervisor of agricultural advertising, and recently district representative in New York state, has been appointed an assistant sales manager; **E. A. Tiarks** and **W. F. Jordan,** former district representatives, appointed assistant sales managers, western and eastern divisions, respectively, and **Gordon Fowler,** former eastern sales division assistant, appointed an assistant sales manager of the plains division.

E. A. Tiarks

The company also has announced related organizational changes: The engine sales department, managed by **H. W. Smith,** will now operate as

W. F. Jordan

the industrial division of the general sales department, under the general administration of **H. H. Howard,** director of sales. Mr. Smith will continue as manager of the division. The sales training division will suspend organized sales training classes and all other functions will be transferred to the sales development division.

Lewis-Shepard Products, Inc., has made the following appointments in the New York area: **Walter S. Peper,** as sales representative on the staff of the area's sales and service headquarters at Tonnelle avenue and 34th street, North Bergen, N. J., will have complete charge of sales in lower Manhattan; **Dave G. Richmond,** former Connecticut representative for the Watertown, Mass., materials handling equipment firm, will be in charge of sales in the Brooklyn and Jersey City areas, and **Ross McIver,** Newark, N. J., representative, will handle sales for the Newark area as heretofore, but with the full complement of the New York sales and service facility at North Bergen.

Roy F. Hancock, who has been appointed assistant to vice-president in charge of sales for the Vanadium Corporation of America, with headquarters at 420 Lexington avenue, New York. Mr. Hancock formerly was associated with the Carnegie-Illinois Steel Corporation, Pittsburgh, Pa., as manager of eastern alloy steel sales

T. W. Krueger has been appointed assistant general sales manager of the **Duff-Norton Manufacturing Company,** Pittsburgh, Pa. In addition to his new duties, he will continue to direct advertising and sales promotion activities. Mr. Krueger joined the company in 1947 as advertising and sales promotion manager and before that was with the advertising department of the Jones & Laughlin Steel Corp.

E. Z. Zimmerman has been appointed associate design engineer of **Luminator, Inc.**

The **Universal Atlas Cement Company,** a subsidiary of the United States Steel Corporation, has moved to 100 Park avenue, New York.

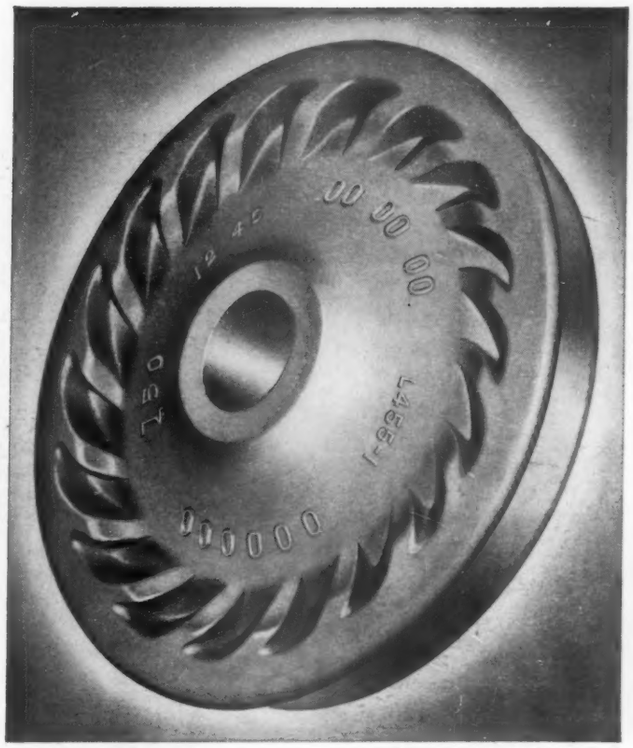
John V. Freeman, director of the coal chemical sales division, commercial department, of the **United States Steel Corporation,** has retired after 43 years of service. Mr. Freeman was first employed by U. S. Steel in 1908 as assistant chief chemist at the Joliet, Ill., plant of the Illinois Steel Company (U.S. Steel subsidiary). In 1925 he was transferred to the U. S. Steel Corporation at New York as technical assistant in the coke by-product sales and production division. He joined U. S. Steel of Delaware in 1938 in a similar capacity, and became assistant to vice-president in 1941. He was appointed director of coal chemical sales in 1948.

OBITUARY

Harry Hanson, vice-president and secretary of the Griffin Wheel Company, died at Chicago on January 12, after 48 years service with that company.

(News continued on page 59)

greater flange and rim strength in chilled car wheels



New AMCCW Design Continues Trend of Steady Improvement

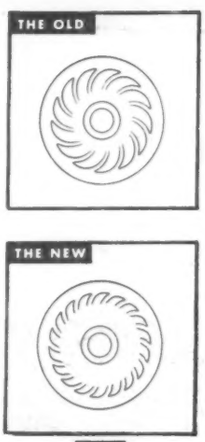
The chilled car wheel developed by the Association of Manufacturers of Chilled Car Wheels and approved by the AAR effective September 1, 1950, gives added rim strength by thickening this section of the tread and giving it more support by a change in the contour of the wheel plate. Flange strength is also improved by the addition of metal to the underside of the tread on the flange side, and an increase in the number of supporting brackets from 13 on the most common size to a minimum of 18.

Rim strength is improved 100%, according to the impact test in which a 500-pound weight is dropped five feet to a striking key positioned one inch from the outer surface of the rim. In this test the new wheels stand better than twice as many blows as the old standard wheel.

This new design puts still more value into the chilled car wheel which had already achieved such high safety standards and long service life.

New wheel available in cored or solid hub

An interesting feature of the new wheel adopted in September is the AAR approval of both the cored hub design and the alternate solid hub design. Contour, bracket arrangement, and weight of metal in tread area are identical in the alternate designs.



NOW

MORE BRACKETS
thicker, heavier, more continuous flange support

HEAVIER TREAD
on both rim and flange sides

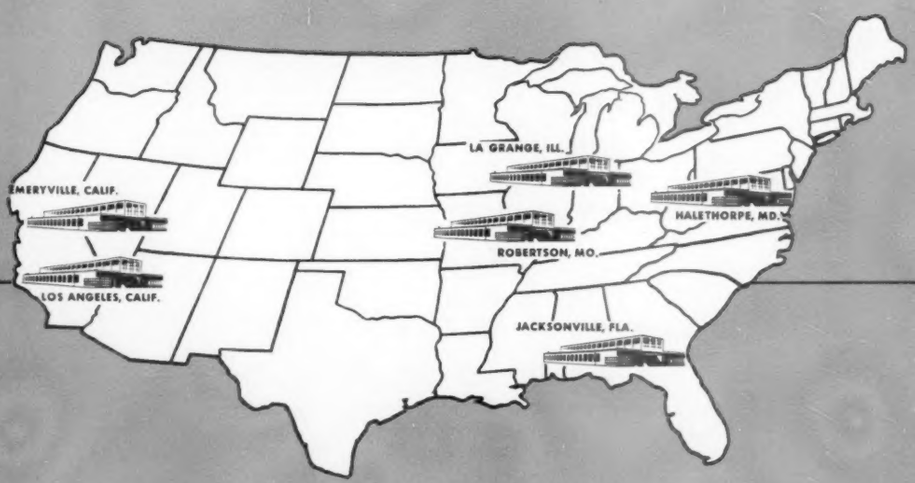
Low first cost
Low exchange rates
Reduced inventory
Short haul delivery
Increased ton mileage
High safety standards
Complete AMCCW inspection
Easier shop handling

ASSOCIATION OF MANUFACTURERS OF CHILLED CAR WHEELS

445 North Sacramento Boulevard, Chicago 12, Ill.

American Car & Foundry Co. • Southern Wheel (American Brake Shoe Co.)
Griffin Wheel Co. • Marshall Car Wheel & Foundry Co. • New York Car Wheel Co.
Pullman-Standard Car Mfg. Co.

Let's look at the map



81% of all General Motors locomotives in the United States are operated by railroads with Electro-Motive factory branches *on their lines.*

Strategic location of production-line rebuilding facilities saves money for our customers and cuts out-of-service time. Compare EMD flat-rate overhaul charges with your present costs and see for yourself.

GM DIESELS ARE THE BEST RAILROAD SECURITY

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS GENERAL MOTORS LOCOMOTIVES LA GRANGE, ILL

Home of the Diesel Locomotive

In Canada: GENERAL MOTORS DIESEL, LTD., London, Ont.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Buffalo Creek,** a switching line owned jointly by the Erie and the Lehigh Valley, has ordered 1,000 50-ton box cars, 500 from the American Car & Foundry Co. for delivery in the fourth quarter of 1951 and 500 from the Pullman-Standard Car Manufacturing Company for delivery in the first quarter of 1952. The road's intention to purchase 1,000 box cars costing $5,500,000 was reported in *Railway Age* of November 25, 1950, page 59.

The **Canadian National** has ordered 40 30-ton steel-framed box cars from the Eastern Car Company.

The **Chicago & Eastern Illinois** has ordered 300 70-ton triple-hopper cars and 700 50-ton twin-hopper cars from the Pressed Steel Car Company.

The **Erie** board of directors has authorized purchase of 500 box and 500 mill-type gondola cars at an estimated cost of $6,400,000.

The **Louisville & Nashville** has ordered 5,950 freight cars costing an estimated $32,000,000. The Pullman-Standard Car Manufacturing Company will build 3,000 50-ton hopper cars and 2,200 50-ton 40½-ft. box cars; the Pressed Steel Car Company will construct 300 50-ton 50-ft. box cars and 450 pulpwood cars were ordered from the road's own shops.

The **Virginian** is inquiring for 300 50-ton steel sheathed box cars.

LOCOMOTIVES

2,396 Locomotives Placed In Service During 1950

Class I railroads installed 2,396 new locomotives in 1950, the highest annual total for the past 27 years, according to an announcement by the Association of American Railroads. New locomotives placed in service during the year included 2,372 diesel-electrics, 12 steam and 12 electrics.

On January 1, 1951, Class I roads had a backlog of 1,644 new locomotives on order. Included were 1,624 diesel-electric, 16 steam and 4 electric locomotives. These figures compare with the backlog of 881 diesel-electrics, 13 steam and 4 electrics on order January 1, 1950. More locomotives were awaiting delivery on January 1, 1951, than at any time since 1923, with the exception of December 1, 1950, when the number was exceeded by 13.

Locomotives installed in December, 1950, totaled 264, which was also the greatest number for any month in the past 27 years, the A.A.R. said. It added that the 2,396 new locomotives placed in service in 1950 compared with 1,865 placed in service in 1949.

SIGNALING

The **Cincinnati, New Orleans & Texas Pacific** has ordered equipment from the General Railway Signal Company for installation of a unit-wire relay interlocking in Cincinnati, Ohio. The control machine will have a 23-in. by 37-in. panel equipped with 22 track lights and 29 levers for control of 13 switch machines, 1 switch lock and 25 signals. Included in this order are model 5C switch machines, type D color-light signals, types K and B relays, and type ME color-light dwarf signals.

The **Michigan Central** has ordered equipment from the General Railway Signal Company for installation of a coded remote control interlocking at Vinewood avenue, West Detroit, Mich. The control machine, to be located in West Detroit, will have an 18-in. by 10-in. panel, equipped with 14 track lights and 12 levers, for control of 6 switch machines, 2 switch locks and 8 signals. Included in this order are model-5C switch machines, model-9A electric switch locks, type-SA searchlight signals and type-K relays.

The **Missouri-Kansas-Texas** has ordered from the Union Switch & Signal Co. material to install automatic signals on approximately 26 mi. of single track between McBaine, Mo., and North Jefferson. The order includes style H-5 searchlight signals, relays, rectifiers, transformers, switch circuit controllers and housings. Field installation will be handled by railroad forces.

The **Texas & New Orleans** has ordered equipment from the General Railway Signal Company for installation of an electric interlocking plant at Houston, Tex. The 104-space machine will control 40 signals and 47 switch machines at an interlocking and crossing with the Houston Belt & Terminal and the International-Great Northern.

ABANDONMENTS

Application has been filed with the I.C.C. by:

ROCK ISLAND SOUTHERN.—To abandon 18.2 mi. of its line, be ween Laws Crossing, Ill., and Galesburg. This road owns about 12,367 ft. of the line while operating the balance under lease. Both segments would be abandoned. The application said losses from operation of the line have been "severe" for the past six years.

WINONA-WINONA & WARSAW.—To abandon their combined rail lines, 21.6 mi., between New Paris, Ind., and Winona Lake. The I.C.C. denied a similar application in 1950 wthout prejudice to renewal at the end of the year. The roads contend they have continued to suffer substantial losses. (See Railway Age of August 12, 1950, page 77.)

Divison 4 of the I.C.C. has **authorized:**

PENNSYLVANIA.—To abandon approximately 1.8 mi. of its Grindstone branch in Fayette county, Pa.

PENNSYLVANIA-READING SEASHORE. — To abandon operation over two segments of branch line, approximately 3.8 mi. and 8.2 mi., respectively, in the vicinity of Woodbine, N. J. The West Jersey & Seashore, owner of the segments, was also authorized to abandon the lines.

TEXAS & NEW ORLEANS.—To abandon approximately 1 mi. of branch line, and 554 ft. of siding, in St. Martin Parish, La.

CONSTRUCTION

Union Pacific to Mechanize Iowa Mail Terminal

Installation of a conveyor system — to speed dispatch of mail and eliminate delays to mail trains—is planned by the Union Pacific for its Council Bluffs, Iowa, mail transfer station. Design and erection of the conveyor system will be undertaken by the Lamson Corporation, of Syracuse, N. Y. Track changes and other major construction work in connection with installation of the new handling system will be undertaken by U.P. forces, with the Chicago, Burlington & Quincy sharing 50 per cent of the cost.

Present methods of handling mail will be changed completely by installation of eight belt conveyors and a 2,900-ft. overhead chain "merry-go-round" conveyor system. At present, an average of 14,000 mail sacks or parcels must be unloaded, sorted and loaded in the hour and 50 minutes between arrival and departure of major mail trains of the U.P. and the Burlington, almost 50 per cent of the daily traffic being handled within a three-hour period. With installation of the conveyor system, unloading and sorting of both parcels and sacked mail will be accomplished simultaneously.

A private automatic telephone exchange will be installed throughout the transfer and platforms.

The present construction schedule calls for track changes to be made as soon as weather conditions permit this spring. This will be followed by structural changes and new tunnels. U.P. engineers "hope" the project will be in operation before the 1951 Christmas mail peak.

Canadian National.—This road has announced an extensive program for rehabilitation of the Newfoundland hotel at St. John's. The hotel will be kept in operation during the renovation which will include installation of new elevators; increasing number of guest rooms by 22; revamping of exterior, restaurant, main dining and ball rooms, main lobby and mezzanine floor; construction of a new laundry; and modernizing of kitchens, service pantry, refrigeration and similar services.

Southern.—This road has applied to the I.C.C. for authority to construct a 6-to 8-mile extension to its Columbia division line near Barnwell, S.C. The proposed new line would connect with

receiving tracks to be constructed near the boundary of the Atomic Energy Commission's Savannah River Plant reservation. Actual length of the Southern's extension would depend upon the location of these A.E.C. tracks, which are now under study. In its application the Southern noted that the A.E.C. proposes to acquire 250,000 acres of land in this area. Construction of the A.E.C. plant is expected to begin immediately. The Southern said that "a project of the magnitude and national importance of the one here involved obviously should have the benefit of access to more than one rail carrier." The plant area is already served by the Atlantic Coast Line, and by an affiliate of the A.C.L., the Charleston & Western Carolina.

CAR SERVICE

I.C.C. Service Order No. 865, which imposes increased demurrage charges running up to $20 per day, has been modified by Amendment No. 4. The amendment extends from January 16 to April 1, the period during which refrigerator cars are exempt from the provisions of the order.

FINANCIAL

Atlantic Coast Line.—*Dividend.*—This road has declared a quarterly dividend of $1.25 a share on its common stock, payable March 12 to stockholders of record February 14. Previous quarterly payments on this issue have been at the rate of $1 a share.

Central of Georgia.—*R.F.C. Loan.*—The I.C.C. has dismissed this road's pending application for approval of a loan of $2,500,000 from the Reconstruction Finance Corporation. The dismissal was made at the road's own request. At the time the loan application was filed, Central planned to use the proceeds in acquiring control of the 140-mi. Savannah & Atlanta. (See *Railway Age* of April 29, 1950, page 73.) Central recently filed a new application with the I.C.C. in which it asked authority to borrow $1,500,000 from private sources for use in acquiring control of the S.&A.

Central of Georgia.—*New Directors.*—Oliver D. Appleton, a member of the investment firm of Cyrus J. Lawrence & Sons, New York, and W. Edward Willett, a director of the Reconstruction Finance Corporation, have been elected members of this road's board of directors.

Chicago, Indianapolis & Louisville.—*Common Dividend.*—This road has declared an initial dividend of $1.25 a share on its class A common stock, payable February 15 to stockholders of record January 29. After payment of this dividend, arrears on the issue will amount to $3.75 a share.

Louisville & Nashville.—*New Director.*—N. Floyd McGowin, president of the W. T. Smith Lumber Company, Chapman, Ala., has been elected to membership on this road's board of directors.

Louisville & Nashville.—*Dividend.*—This road has declared a quarterly dividend of $1 a share on its common stock, payable March 12 to stockholders of record February 1. Previous quarterly payments on this issue have been at the rate of 88¢ a share.

New Securities

Division 4 of the I.C.C. has **authorized:**

ERIE.—To assume liability for $5,400,000 of equipment trust certificates to finance in part 37 diesel-electric locomotives costing approximately $6,894,410. (See Railway Age of January 8, page 66.) The certificates, to be dated January 15, will mature in 20 semiannual installments of $270,000 each, beginning July 15, 1951. Division 4's report approved a selling price of 99.5695 with interest at 2⅜ per cent—the bid of Halsey, Stuart & Co. and nine associates—which will make the annual average cost of the proceeds approximately 2.47 per cent. The certificates were reoffered to the public at prices yielding from 1.7 to 2.55 per cent, according to maturity.

VIRGINIAN.—To issue nominally $4,812,000 of first lien and refunding mortgage bonds, series D, due December 1, 1975. The bonds will bear interest at 3¼ per cent. They will be retained in the company's treasury, where they will "furnish a safeguard against any unexpected contingency in the future."

Security Price Averages

	Jan. 23	Last Week	Last Year
Average price of 20 representative railway stocks	57.29	58.37	42.26
Average price of 20 representative railway bonds	99.56	99.56	91.93

Dividends Declared

Atlantic Coast Line.—(increased), $1.25, payable March 12 to holders of record February 13.

Chicago, Indianapolis & Louisville.—Class A stock trust certificates, $1.25, accumulated, payable February 15 to holders of record January 29.

Great Northern.—non-cumulative preferred, $1, payable March 21 to holders of record February 21.

Louisville & Nashville.—(increased), $1, payable March 12 to holders of record February 1.

Michigan Central.—$25, semiannual, payable January 31 to holders of record January 12.

Investment Publications

[The surveys listed herein are, for the most part, prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

Fahnestock & Co., 65 Broadway, New York 6.

Northern Pacific Railway Co. Weekly Review, January 22.

Hemphill, Noyes, Graham, Parsons & Co., 15 Broad st., New York 5.

Pennsylvania Railroad. Rail Notes: December 22.

H. Hentz & Co., 60 Beaver st., New York 4.

An Analysis of Erie Railroad Company. January 15.

Annual Review and Forecast. January.

Kerr & Co., General Petroleum bldg., Los Angeles, Cal.

Missouri-Kansas-Texas Railroad. December 18, No. 940.

R. W. Pressprich & Co., 48 Wall st., New York 5.

Atlantic Coast Line Railroad. Common Stock. December 19.

Buffalo, Rochester & Pittsburgh Railway. Consolidated 4½s due May 1, 1957. December 14.

Minneapolis, St. Paul & Sault Ste. Marie Railroad. First Cumulative Income 4½s due January 1, 1971. December 28.

Smith, Barney & Co., 14 Wall st., New York 5.

Missouri Pacific Railroad Company. Convertible 5½s, 1949. Railroad Bulletin No. 52, December 29.

Vilas & Hickey, 49 Wall st., New York 5.

Lehigh Valley Railroad. January 17.

Railroad Outlook for 1951. January 12.

Reading Company. January 4.

J. R. Williston & Co., 115 Broadway, New York 6.

Current Position of Railroad Securities. January 9.

RAILWAY OFFICERS

EXECUTIVE

Harold J. McKenzie, whose appointment as executive vice-president of the ST. LOUIS SOUTHWESTERN, with headquarters at St. Louis, Mo., was reported in the December 16, 1950,

Harold J. McKenzie

Railway Age, was born at Houston, Tex., on October 11, 1904. Mr. McKenzie was graduated with a B. S. degree from Texas Agricultural & Mechanical College in 1927. He entered

railroad service in the drafting department of the Southern Pacific Lines in Texas & Louisiana in 1926, and from 1927 to 1936 was employed progressively in various positions in the same department. During this period he also continued his education, attending a Houston engineering school for three years. In 1936 he was appointed chief draftsman, continuing in that position until 1939, when he was made assistant to the chief engineer. In January, 1944, Mr. McKenzie was advanced to assistant chief engineer, and in April, 1945, was further promoted to chief engineer, the post he held at the time of his recent appointment on the Cotton Belt.

Clarence L. Binger, who has been appointed vice-president—freight traffic of the CHICAGO, AURORA & ELGIN, at Chicago, as reported in the *Railway Age* of November 25, 1950, was

Clarence L. Binger

born on February 24, 1898, at Newark, Ohio, where he attended school. In the fall of 1914 he entered railroad service at Newton, Kan., with the Atchison, Topeka & Santa Fe, and the following year became employed on the Pittsburgh, Cincinnati, Chicago & St. Louis (now Pennsylvania) at Newark, with which road he remained until 1920, except for service in the U. S. Navy between December, 1917, and April, 1919. Subsequently Mr. Binger joined the Luetkemeyer Company at Cleveland, Ohio, later becoming reassociated with the Pennsylvania at that point. In 1922 he went with the Southern Pacific at Cleveland as traveling agent, and three years later joined the Chicago South Shore & South Bend, with which road he served as freight traffic manager (sales and service) for seven years prior to his new appointment with the C. A. & E.

Howard Skidmore, executive assistant to vice-president of the CHESAPEAKE & OHIO at Cleveland, Ohio, will be responsible, under the direction of the vice-president, for administration of the passenger and public relations department, including the passenger traffic, press relations and advertising divisions. **Stuart Cameron,** assistant to vice-president at Washington, D. C., in addition to present duties, will be in charge of the passenger and public relations office, Room 809, 711 Fourteenth street, N.W. **Ann E. Stevenson,** assistant to vice-president at New York, has been transferred to Cleveland.

E. L. Faulconer, executive general agent of the SOUTHERN SYSTEM at Greensboro, N. C., has been appointed also vice-president of the GEORGIA SOUTHERN & FLORIDA at Macon, Ga. **Hamlin Brown** has been appointed vice-president of the CINCINNATI, NEW ORLEANS & TEXAS PACIFIC at Cincinnati, Ohio, succeeding **William J. Wilkins,** deceased.

FINANCIAL, LEGAL & ACCOUNTING

H. M. Kendall, assistant general superintendent of transportation of the ATLANTIC COAST LINE, has been appointed auditor of car service accounts, with headquarters as before at Wilmington, N. C.

Carson L. Taylor, whose promotion to general solicitor of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, with headquarters at Chicago, was reported in the December 23, 1950, *Railway Age*, was born at Cedar Falls, Iowa, on December 28, 1889. After receiving his LL. B. degree from the

Carson L. Taylor

University of Iowa, Mr. Taylor engaged in law practice at Cedar Rapids, Iowa, and Des Moines until 1929, at which time he became assistant general solicitor for the Milwaukee. In 1939 he was appointed commerce counsel for that road and in June, 1941, was made general attorney and commerce counsel, in which capacity he served until his recent promotion.

H. Heckman, assistant auditor of freight accounts of the CANADIAN NATIONAL, has been appointed auditor of freight accounts, with headquarters as before at Montreal, Que., succeeding **T. B. Hughes,** who has retired after 41 years of service. Mr. Heckman was born at Montreal, where he began his railway career in 1911 as an office boy in the office of the auditor of freight accounts of the Grand Trunk (C.N.) He held various clerical positions in that office until 1929, when he was appointed accounta..t in the freight accounting bureau of the C.N. In 1939 he became assistant chief clerk of the bureau and four years later was appointed chief clerk. Mr. Heckman was named assistant auditor of freight accounts in 1947.

Sidney C. Murray, general counsel of the NEW YORK CENTRAL at Chicago, will retire on January 31. Succeeding Mr. Murray as head of the road's law department at Chicago is **Marvin A. Jersild,** who will retain the title of assistant general counsel. Mr. Murray was born at Davenport,

Sidney C. Murray

Iowa, on July 4, 1883, and was graduated from Yale University in 1907 and from Northwestern University Law School in 1910. Entering the Central's law department as an attorney in April, 1911, he served successively as assistant general attorney and general at-

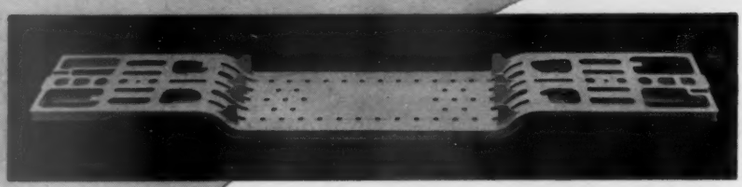
Marvin A. Jersild

torney, and in November, 1929, was appointed general counsel. Mr. Murray was a New York Central director from 1944 to 1949, and is a director of several affiliated roads.

(Continued on page 64)

Heavy Duty Depressed Center Car with Commonwealth 6-wheel trucks

One-piece Cast Steel Underframe Designs for 90-, 125-, 137½-, and 175-ton capacity cars

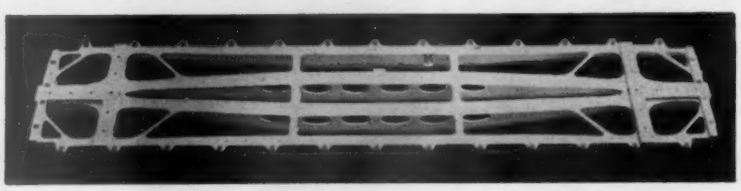


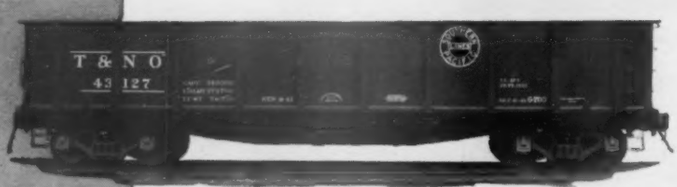
COMMONWEALTH ONE-

Designed For

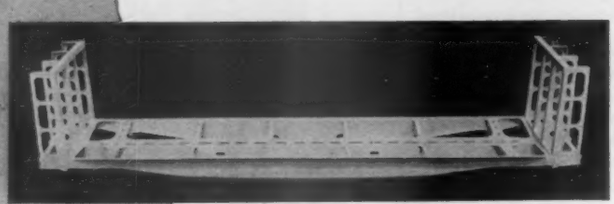
70-Ton Flat Car With One-piece Cast Steel Underframe

One-piece Cast Steel Underframe Designs for 50- and 70-ton capacity cars

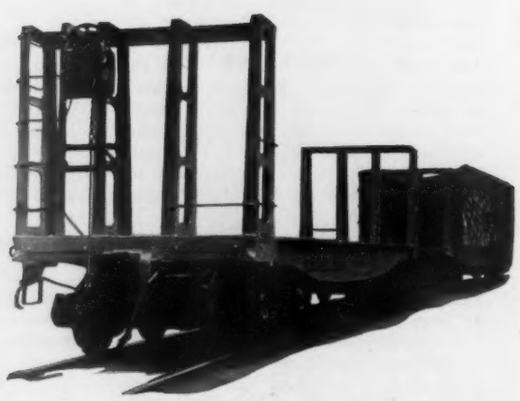




Sulphur Car with Cast Steel Underframe

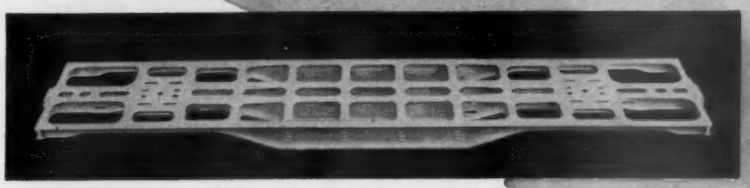


One-piece Cast Steel Underframe for Pulpwood Car with Cast Steel End Posts Applied



50-ton, 22 Cord Pulpwood Car with Cast Steel Underframe and End Posts

Heavy Duty Flat Car with Commonwealth 6-wheel Trucks



One-piece Cast Steel Underframe Designs for 125-, 200-, and 215-ton capacity cars

PIECE UNDERFRAMES

"Special Service" Freight Cars

Provide Longer Life, Greater Strength, Elimination of Maintenance Costs

COMMONWEALTH one-piece cast steel underframes offer many advantages for *all* special types of freight cars where maximum strength for extra heavy loads, unusual design or resistance to corrosion are important.

COMMONWEALTH underframes combine the elements of great strength, durability and simplicity. The one-piece cast steel construction eliminates all welded or riveted joints, rivets and bolts, and provides a smooth top surface for floor application.

For depressed center cars and flat cars, cast steel construction permits minimum height from rail to loading floor. The distribution of metal where it is needed most, provides exceptional strength without increase in weight. For sulphur-carrying cars, cast steel's resistance to rust or corrosion is especially important.

For pulpwood cars, cast steel underframes and end posts also provide larger capacity, easier loading and maintenance-free service. In all cases *upkeep costs are eliminated, longer life assured.*

For every type of "special service" freight cars, including well cars, depressed center cars, flat cars, sulphur-carrying cars, ore cars and others; specify COMMONWEALTH Underframes.

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. • EDDYSTONE, PA.

(Continued from page 61)

Mr. Jersild was born at Gowen, Mich., on July 19, 1897. He attended Elk Horn College, Dana College and the University of Chicago Law School, and was admitted to the bar in 1922. In the same year he entered the Central's law department as an attorney at Chicago. He has served as assistant general counsel since 1933.

Joseph H. Wright, assistant general solicitor of the ILLINOIS CENTRAL, has been advanced to general counsel, effective February 1, with headquarters as before at Chicago. Mr. Wright succeeds to the duties of **Vernon W. Foster,** vice-president and general counsel, who is retiring on January 31, as reported in the January 22 *Railway Age*. A native of Waukesha, Wis., Mr. Wright received his LL. B. degree from

Joseph H. Wright

Northwestern University in 1919. While attending high school and college, he worked as a night telegrapher for the Minneapolis, St. Paul & Sault Ste. Marie. His law school education was interrupted for two years during World War I when he served as an aviator. He joined the I. C.'s law department in 1919, and subsequently served as assistant chief clerk, chief clerk, attorney, assistant to general solicitor and general attorney. He was appointed assistant general solicitor in 1947.

Harold L. Pratt, right of way and tax agent for the CANADIAN PACIFIC'S Prairie and Pacific regions at Winnipeg, Man., has retired after 45 years of service with that road. With Mr. Pratt's retirement, separate right of way and tax departments have been formed. **Wilfred Humphreys,** chief surveyor for lines west, becomes also right of way and lease agent for the Prairie region, and **George Fanning,** assistant tax agent, has been appointed tax agent for the Prairie region. Mr. Pratt was born in Bareilly, India, and came to Canada after serving with the Imperial Yeomanry in the Boer War. He joined the C. P. as a stenographer in the law department at Winnipeg, and was advanced successively through various positions until his appointment in 1945 as right of way and tax agent.

Mr. Humphreys is a native of Southampton, England. He first entered C. P. service in 1912, and in 1926 became surveyor. He was appointed chief surveyor in 1932.

Mr. Fanning has served in the right of way and tax department of the C. P. for more than 18 years. He was headquartered at Vancouver, B. C., prior to his transfer in the fall of 1950 to Winnipeg as assistant tax agent.

OPERATING

T. E. Griswold, whose retirement as superintendent, Eastern division, of the TEXAS & PACIFIC at Fort Worth, Tex., was reported in the December 16, 1950, *Railway Age*, was born on December 2, 1887, at East Point, Ky. He entered T. & P. service as a brakeman in 1912, being advanced later to successive positions as conductor, assistant yardmaster, night general yardmaster and assistant trainmaster. In 1930, when the latter position was abolished, Mr. Griswold returned to his former position as night general yardmaster. He also served during 1930 as general yardmaster at Mineola, Tex., and Marshall, and in the following year was promoted to terminal trainmaster at Texarkana, Ark. In 1939 he became trainmaster with jurisdiction over the line between T. & P. Junction and Mineola, and in 1940 went to Marshall as assistant superintendent. He was transferred to Fort Worth in 1942, and in August, 1948, was promoted to superintendent there.

Buford G. Nash, who has been promoted to division superintendent of the CHESAPEAKE & OHIO, with headquarters at Grand Rapids, Mich., as reported in the December 9, 1950, *Railway Age*, is a native of Nashville, Tenn. Mr. Nash started railroad service as a yard clerk on the C. & O.

Buford G. Nash

Later he served as switchman at Detroit, Mich., and subsequently was advanced through the ranks to trainmaster of the Chicago and Petosky division. In 1949 he was appointed assistant superintendent at Grand Rapids, the post he held until his present promotion.

A. M. Ball, superintendent of the Southern division of the ST. LOUIS-SAN FRANCISCO, at Memphis, Tenn., has been appointed assistant general superintendent of transportation, with headquarters at Springfield, Mo. He is succeeded by **L. W. Menk,** superintendent of the Central division at Ft. Smith, Ark. **R. C. Grayson,** assistant superintendent of the Southern division at Amory, Miss., succeeds Mr. Menk, and is in turn replaced by **J. K.**

A. M. Ball

Beshears. H. A. Linderer, safety supervisor at Springfield, becomes terminal trainmaster at Memphis, and **W. J. Essner** becomes assistant to general superintendent of transportation at Springfield. Mr. Ball was born on March 8, 1903, at Springfield, and was educated at Draughon's Business Uni-

R. C. Grayson

versity. He entered railroad service in January, 1920, as a stenographer on the Frisco, and subsequently held various clerical and secretarial positions until 1935, when he became inspector of passenger transportation. In 1937 he was appointed assistant superintendent, and one year later was made assistant superintendent of transportation. From February, 1942, to August, 1947, Mr. Ball served as superintendent of transportation at Springfield. He was subsequently made superintendent of the Northern division at Fort Scott, Kan.,

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from Diesel-Electric Switchers

Safety Control

Self-lapping Independent Brake Valve, Bell Ringer and Sander

Train Stop

Westinghouse Air Brake Co.

WILMERDING, PA.

being transferred in that capacity to the Southern division in July, 1950.

Mr. Grayson joined the Frisco in June, 1941, as brakeman and conductor. In July, 1950, he was appointed assistant superintendent of the Southern division from which position he has been promoted.

D. W. Tanner, trainmaster of the SOUTHERN PACIFIC, has been promoted to assistant superintendent, Salt Lake division, with headquarters remaining at Ogden, Utah.

L. M. Stuart, assistant to president of the MISSOURI-KANSAS-TEXAS LINES at St. Louis, Mo., has been appointed general superintendent of transportation, with headquarters at Denison, Tex. Mr. Stuart was born on January 6, 1894, at Parsons, Kan.,

L. M. Stuart

where he entered service with the Katy in July 1909, as a stenographer in the mechanical department. During the ensuing years he held various positions; in 1923 he became general merchandise agent at Denison. He was appointed assistant to president at St. Louis in 1946.

Howard Jones has been appointed superintendent of the MISSOURI PACIFIC's St. Louis Terminal division, at St. Louis, Mo., effective February 1, succeeding **A. R. Miller,** who is retiring after 50 years of service. **J. D. Woodward,** assistant superintendent at Dupo, Ill., has been transferred to St. Louis, and is succeeded by **R. W. Parker,** assistant superintendent at Kansas City, Mo. **R. C. Wildeboor** has been appointed to succeed Mr. Parker. **C. A. Hughes,** division trainmaster at Atchison, Kan., moves to Nevada, Mo., to succeed **J. L. Kendall,** who has retired. Succeeding Mr. Hughes is **H. A. Hopkins.**

V. E. Anderson, assistant division superintendent of the SOUTHERN PACIFIC at Ogden, Utah, has been promoted to superintendent of transportation, with headquarters at San Francisco, Cal., and with jurisdiction over the road's Pacific Lines in six western states. Mr. Anderson started with the S. P. in 1929 as a caller of train and engine crews on the Western division at Oakland, Cal. After serving as yardman, engine foreman and yardmaster, he became an assistant trainmaster on

V. E. Anderson

that division in 1943. He later served as trainmaster and terminal superintendent on the Tucson division, and three years ago became assistant division superintendent at Ogden.

James F. Lynch, acting superintendent of the WESTERN PACIFIC, has been appointed superintendent of the road's Eastern division, with headquarters remaining at Elko, Nev.

Louis E. King, trainmaster of the SOUTHERN at Alexandria, Va., has been appointed superintendent at Charleston, S. C., effective February 1, succeeding **Frank B. Birthright,** whose appointment as executive general agent was reported in the *Railway Age* of January 22.

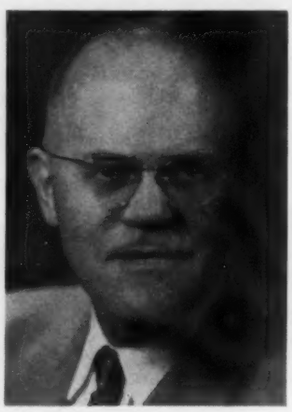
TRAFFIC

Arthur E. Brown and **Fred O. Eschenbrenner,** commercial agents of the CHICAGO, BURLINGTON & QUINCY at St. Paul, Minn., and Kansas City, Mo., respectively, have been appointed general agents, freight department, at those points. **Fred Meyer,** commercial agent at Centralia, Ill., has been made division freight agent there, and **B. P. Hart,** foreign freight agent at Chicago, becomes general foreign freight agent at that point. **H. J. Walther** becomes general agent at Salt Lake City, Utah, succeeding **J. H. Gregory,** who has retired after more than 48 years of service.

E. A. McCarthy, whose retirement as assistant traffic manager of the WESTERN PACIFIC at Chicago, was announced in the December 9, 1950, *Railway Age*, was born at Bloomington, Ill., on November 3, 1885, and attended high school at Chicago. Starting his railroad career in 1901 as a caller on the Chicago & Eastern Illinois, Mr. McCarthy later served with that road as yard clerk, ticket clerk, bill clerk and chief clerk. In 1904 he went with the Pere Marquette (now P. M. District, Chesapeake & Ohio), serving as assistant agent and agent at the Union Stockyards in Chicago. Later he served as agent and contracting freight agent at the same yards for the C. & O., and in 1918 became manager, traffic and deliveries, of the United Motors Section of General Motors Corporation. Mr. McCarthy joined the W. P. in 1929 as freight traffic agent at Chicago, and in 1931 became general agent at Portland, Ore., returning to Chicago in 1937 as assistant traffic manager.

E. O. Sikes has been appointed general agent of the KANSAS CITY SOUTHERN LINES at Texarkana, Ark.

Arthur H. Lund, whose promotion to assistant traffic manager of the WESTERN PACIFIC, with headquarters at Chicago, was reported in the December 9, 1950, *Railway Age*, was born at Oakland, Cal., on June 17, 1897, receiving his education in that city's public schools. Mr. Lund began railroad service in September, 1915, with the Southern Pacific in its general offices, but resigned in February, 1918, to enlist in the U. S. Army. Following his discharge at Camp Eustis, Va., in May, 1919, he remained there for one year,



Arthur H. Lund

working as a civilian yardmaster. Subsequently he served for two and one-half years as chief clerk for the Great Northern, and in September, 1923, joined the W. P. as city freight agent at Oakland. Between 1925 and 1930, Mr. Lund served with the Chicago, Burlington & Quincy, later returning to the W. P. as city freight agent at San Francisco. In 1931 he was made general agent at Spokane, Wash. Upon the merger of the Spokane and Seattle territories in May, 1943, he became general agent at the latter point, from which position he was recently promoted.

C. W. Haynes, general passenger agent of the CHESAPEAKE & OHIO at Richmond, Va., has been promoted to assistant passenger traffic manager, continuing in charge of rates. **W. R. Rhodes,** general eastern passenger agent at New York, has been trans-

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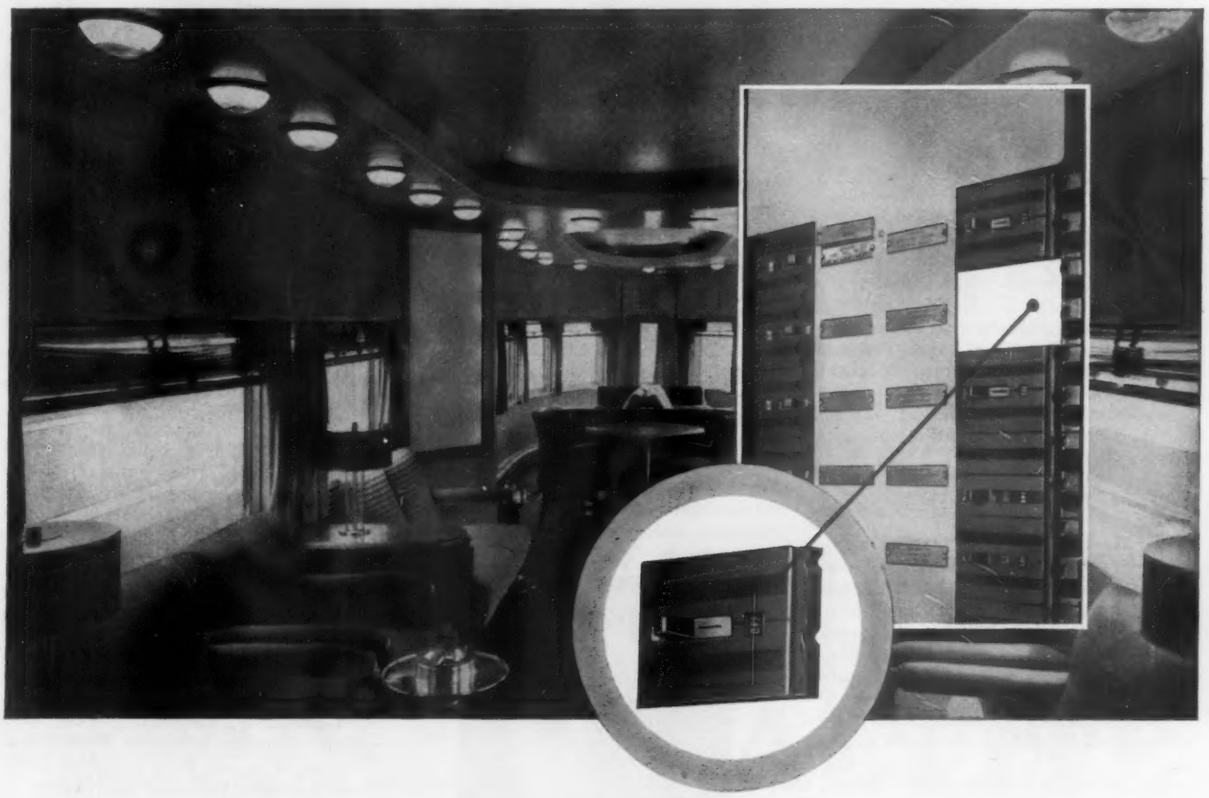

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AB CIRCUIT BREAKERS

THE COMPLETE LINE

ferred to Richmond, with direction of passenger activities in the Hinton to Hampton Roads territory, paying particular attention to military installations. **C. L. Dozier,** assistant to passenger traffic manager at Washington, D. C., has been promoted to general passenger agent at Richmond, succeeding **H. T. Askew,** whose appointment as passenger traffic manager at Cleveland, Ohio, was reported in the *Railway Age* of January 22. **R. L. Gentry,** assistant to manager, Bureau of Conventions and Tours, at Washington, has been promoted to assistant to passenger traffic manager, succeeding Mr. Dozier, with headquarters at Cleveland. **W. E. Turner,** assistant to passenger traffic manager, has been transferred to the freight traffic department at Washington. **J. G. Metz,** manager, Bureau of Conventions and Tours, has been named manager of sales, passenger traffic division, with responsibility for developing system passenger revenues, continuing his office at Washington. The Bureau of Conventions and Tours has been renamed Tours and Conventions Bureau, with Mr. Metz continuing in charge.

C. M. Biggs, freight traffic manager for the Central district of the SOUTHERN PACIFIC, with headquarters at San Francisco, Cal., has been transferred in that capacity to Chicago, where he succeeds **C. T. Collett.** Mr. Collett's appointment as general traffic manager appeared in the January 8 *Railway Age*. **P. P. Dougherty,** assistant freight traffic manager, Central district, succeeds Mr. Biggs. Starting service with the S. P. in 1916 as tariff

P. P. Dougherty

clerk at San Francisco, Mr. Dougherty later held the position of chief clerk in the foreign freight department and the district freight office at that point. Subsequently he served as district freight and passenger agent at Modesto, Cal., general agent, merchandise traffic, at San Francisco, and district freight agent at Oakland and San Francisco. In 1940 he was appointed assistant general freight agent for the Central district, becoming assistant freight traffic manager in 1949.

R. W. Ohlman, general passenger agent, Pere Marquette district, CHESAPEAKE & OHIO, at Grand Rapids, Mich., has been transferred to Chicago, with jurisdiction over passenger activities at that point in addition to his present duties. **J. C. Moore,** city passenger agent at Columbus, Ohio, has been appointed district passenger agent at Chicago, succeeding **R. B. Goodman,** who has been transferred to New York as assistant general passenger agent.

Clyde E. Hill, assistant general freight agent of the MINNEAPOLIS & ST. LOUIS at Des Moines, Iowa, and chief representative for that road in Iowa for many years, has been promoted to assistant freight traffic manager. It was incorrectly reported in the December 23, 1950, *Railway Age* that Mr. Hill had been advanced to general freight agent.

Thomas K. Earley, assistant freight traffic manager of the DENVER & RIO GRANDE WESTERN, at Denver, Colo. has been promoted to freight traffic manager—rates and divisions. **John C. Borg,** assistant to vice-president—traffic, has been appointed freight traffic manager—sales and service. Both of

Thomas K. Earley

these positions have been newly created. Succeeding Mr. Borg is **Fred H. Booth,** assistant general freight agent—statistics. Mr. Earley was born at St. Joseph, Mo., on June 18, 1899, and received his higher education at Regis College, Denver. He entered railroad service in 1917 as a tariff clerk in the freight traffic department of the Rio Grande at Denver, and served in various clerical capacities until 1924, when he became city freight agent at Chicago. In 1927 Mr. Earley was appointed chief clerk in the tariff department at Denver, and in 1934 was advanced to assistant general freight agent, with the same headquarters. In 1936 he was promoted to general freight agent at Denver, and in January, 1946, became assistant freight traffic manager there.

Mr. Borg entered railroad service in 1934 as a stenographer-clerk for the Illinois Central at Omaha, Neb., joining the Rio Grande in 1935. After graduation from the University of Omaha in 1936, he was admitted to the Nebraska bar. He went to Denver in 1939, and served for two years with the public relations and advertising

John C. Borg

departments before being transferred to Chicago in 1941 as assistant to the eastern traffic manager. Mr. Borg returned to Denver in 1944, and since April, 1947, has served as assistant to vice-president—traffic.

G. T. Magee, division freight agent for the NEW YORK CENTRAL SYSTEM at Cincinnati, Ohio, has been appointed assistant general freight agent at St. Louis, Mo.

George W. Carnell, general agent of the CHICAGO & NORTH WESTERN at Racine, Wis., has been promoted to division freight and passenger agent.

M. J. Cummins, M. J. Moran and **C. A. Osika** have been appointed general agents of the ELGIN, JOLIET & EASTERN, with headquarters at Chicago.

Jack H. Butridge, general agent of the ILLINOIS CENTRAL at Cleveland, Ohio, has been appointed general freight agent at St. Louis, Mo., effective February 1. He succeeds **M. L. Corbett,** who has been assigned to other duties due to ill health. Succeeding Mr. Butridge is **Lester A. Schellenberger,** general agent at Denver, Colo., who is in turn replaced by **Ernest R. Haskins,** commercial agent at Pocatello, Idaho.

J. Schmuck, Jr., has been appointed assistant general freight agent (rates and divisions) of the VIRGINIAN at Norfolk, Va. **Alfred Hussnatter** has been appointed foreign freight agent at New York.

George W. Madsen, assistant freight traffic manager of the ERIE, has been appointed freight traffic manager, with headquarters as before at New York, succeeding **Arthur R. Walton,** who will retire on January 31, after 49 years of continuous service. A photograph and biography of Mr. Walton were published in the *Railway Age* of November 11, 1950, page 108. **Ber-**

nard F. Conway, assistant general freight agent at Buffalo, N. Y., will succeed Mr. Madsen as assistant freight traffic manager at New York. **Charles C. Mitchell,** general agent at New Haven, Conn., has been appointed foreign freight agent at Chicago, succeeding **Lewis E. Newman,** who replaces Mr. Conway at Buffalo. **Paul W. Johnston, Jr.,** has been appointed general agent at Boston, Mass., succeeding **Michael R. Fitzgerald,** who has been transferred to New Haven, to replace Mr. Mitchell.

MECHANICAL

B. J. Maguire has been appointed assistant to superintendent motive power of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, with headquarters at Milwaukee, Wis., succeeding **W. A. Hotzfield,** who has resigned.

PURCHASES & STORES

J. F. Short, chief clerk in the CANADIAN PACIFIC's purchasing department at Vancouver, B. C., has been appointed assistant purchasing agent at that point, succeeding **Anson Rutledge,** who has retired. Mr. Short entered the service of the C. P. in 1910 as an office boy in the purchasing department. During World War I he served overseas with the Canadian Field Artillery from 1916 to 1918, returning to the C. P. in 1919 as clerk. Since that time he has worked in all branches of purchasing for the road.

Charles K. James has been appointed purchasing agent, Western region, of the CANADIAN NATIONAL, with headquarters at Winnipeg, Man., succeeding **C. R. Snell,** who has joined the Canadian Commercial Corporation at Ottawa, Ont., on loan from the railway.

Henry M. Compton, chief clerk to the general purchasing agent of the ST. LOUIS-SAN FRANCISCO, has been appointed assistant general purchasing agent, with headquarters at St. Louis, Mo.

E. K. Schrader has been appointed assistant general storekeeper of the ELGIN, JOLIET & EASTERN, with headquarters at Joliet, Ill.

As reported in the *Railway Age* of January 8, **Francis J. McNulty** has been appointed storekeeper of the BOSTON & MAINE, the MAINE CENTRAL and the PORTLAND TERMINAL at Boston, Mass. Mr. McNulty was born on August 6, 1895, at Milford, N. H., and attended the public schools of Billerica, Mass., and Lowell. He entered railroad service on June 15, 1915, as a laborer at the Billerica shop stores of the B.&M. and six months later became store clerk at the Boston, Mass., terminal. From June 27, 1917, to June 2, 1919, Mr. McNulty was in military service with the 14th Railway Engineers, returning to his position with the B. & M. on the latter date. From November, 1922, to July, 1924, he was acting storekeeper at Boston, becoming store clerk there on the latter date. He was appointed clerk in the general office at Boston on November 15, 1924; assistant stores accountant on November 16, 1925; chief clerk to general storekeeper on February 1, 1928; chief

Francis J. McNulty

clerk in the purchasing department on July 7, 1930; and assistant to general storekeeper on January 1, 1942, which position he held until his recent promotion to general storekeeper.

ENGINEERING & SIGNALING

B. M. Stephens, Jr., formerly assistant to chief engineer of the TEXAS & NEW ORLEANS (part of the SOUTHERN PACIFIC LINES) at Houston, Tex., has been advanced to assistant chief engineer of the S. P. LINES IN TEXAS AND LOUISIANA, succeeding **Lee A. Loggins,** whose promotion to chief engineer appeared in the December 23, 1950, *Railway Age*. Succeeding Mr. Stephens is **Ben F. Biaggini, Jr.,** senior assistant engineer. Mr. Stephens was born on June 2, 1904, at Dallas, Tex., and attended Texas Agricultural & Mechanical College. He entered T. & N. O. service in October, 1926, as a draftsman in the chief engineer's office at Houston, and in 1929 became an estimater-draftsman for the Dallas division at Ennis, Tex. From December, 1929, to October, 1935, he held successively the positions of office engineer estimater-draftsman, rodman and draftsman at Ennis. He was subsequently transferred to Houston as draftsman in the chief engineer's office, and in 1939 was advanced to chief draftsman at that point, being promoted to architectural engineer at Houston in July, 1945. Mr. Stephens was appointed assistant to chief engineer in December, 1948.

B. M. Stephens, Jr.

SPECIAL

Paul Harrison has been appointed director of public relations of the UNION PACIFIC at Los Angeles, Cal., succeeding **William Rowland Moore,** who has assumed new duties as general director of public relations at Omaha, Neb., as reported in January 8 *Railway Age*. Prior to his appointment with the U. P., Mr. Harrison was science editor of a Los Angeles newspaper.

H. L. Hammond, former assistant chief of police of the CHICAGO & EASTERN ILLINOIS, has been advanced to chief of police, with headquarters at Danville, Ill., succeeding **William B. Sloan,** whose retirement was reported in the January 8 *Railway Age*.

Malvin Leroy Shaffer, formerly an engineman on the ST. LOUIS-SAN FRANCISCO, has been appointed safety supervisor, with headquarters at Sprinfield, Mo., succeeding **H. A. Linderer,** who has been advanced to terminal trainmaster at Memphis, Tenn., as reported elsewhere in this issue.

William B. Seymour, assistant to chief of personnel of the ATLANTIC COAST LINE, has been appointed personnel assistant, with headquarters as before at Wilmington, N. C.

Walter S. Jackson, advertising manager of the CHESAPEAKE & OHIO at Cleveland, Ohio, in charge of the advertising division, passenger and public relations department, will assume direction of various other department activities in addition to his present duties. **Joseph F. Doherty,** special representative, has been named press relations manager in charge of the press relations division at Cleveland.

OBITUARY

H. A. Sjogren, assistant to superintendent car department of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Milwaukee, Wis., died on January 7 at his home in that city.

Clyde E. Brown, vice-president of the SAN FRANCISCO & NAPA VALLEY, at Napa, Cal., died in that city on December 29.

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